John Cranford,
M. D.

OBSERVATIONS

ON THE

SEATS AND CAUSES

OF

DISEASES,

&c.

OBSERVATIONS

ON THE

SEATS AND CAUSES

OF

DISEASES:

ILLUSTRATED BY THE

DISSECTIONS

OF THE LATE

PROFESSOR MORGAGNI OF *PADUA.*

BY

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SCHOOL OF M... INE

Crawford

TO

BARTHOLOMEW PARR, M.D.

FELLOW OF THE ROYAL SOCIETY OF EDINBURGH, PHYSICIAN TO THE DEVON AND EXETER INFIRMARY, ETC.

SIR,

I WISH I could offer a better proof of attention to the frequent and valuable advice, with which you honoured me at a very early period of my life, than what the following Work contains.

As it is, I have ventured to lay it at your feet; ſince it affords me an opportunity of aſſuring you, that neither the diſtance at which we are placed, nor the avocations in which we are ſeverally engaged, can ever eraſe from my mind the ſenſe I entertain of the favours you have conferred upon,

SIR,

Your much obliged

Humble Servant,

JAS. HAMILTON, JUNR.

Edinburgh, Caſtlehill,
Jan. 20. 1795.

PREFACE.

A VIEW of the morbid appearances in dead bodies, enables the medical practitioner to aſcertain the cauſes of ſome diſeaſes, and the conſequences of others; and, therefore, can be uſeful only when connected with the ſymptoms which preceded death, and when applied to explain ſuch ſymptoms.

On this principle, THEOPHILUS BONETUS publiſhed the Sepulchretum Anatomicum. But that work, even improved as it was by Mangetus, although in many reſpects valuable, being neceſſarily a rude ſketch only, the celebrated Profeſſor MORGAGNI of Padua undertook to render it more perfect, by the publication of Seventy Letters on the Seats and Cauſes of Diſeaſes.

The great abilities, and extraordinary induſtry, diſplayed by MORGAGNI in theſe letters, deſervedly entitle them to a much higher panegyric than it would be proper for the Editor of the following work to beſtow.

So extenſively, however, has medical knowledge been diffuſed ſince the publition of MORGAGNI's writings, although no more than a period of about thirty years has elapſed, that they are now deemed chiefly valuable on account of the facts which they contain. As, therefore, readers in general find they have to wade through a prodigious quantity of unintereſting matter, before they can arrive at what they regard as uſeful; theſe writings are at preſent ſeldom looked into, being only occaſionally conſulted as a dictionary.

The Editor of the following pages was induced, by theſe conſiderations, to believe, that, without deviating from the principles of

of MORGAGNI's plan, ſuch alterations might be made on the original work, as ſhould contribute to render the many important facts with which it abounds extenſively known, and conſequently generally intereſting.

No ſooner had he formed the deſign of making an attempt of this kind, than he laid it aſide, on Dr. Baillie's propoſed publication on the Morbid Anatomy of the Human Body being announced. With great pleaſure he yielded the taſk to one ſo much better qualified to undertake it. But when that work appeared, he found that Dr. Baillie's views were very different from his own; and, flattering himſelf that the labours of both might be ſeverally uſeful, he again reſumed his intention.

The principles, by which he reſolved to be directed in the execution of his project, were theſe—To retain only the facts witneſſed by MORGAGNI, or his preceptor VAL-

SALVA, or that ſeem eſtabliſhed on unequivocal authority—to new arrange the whole —to prefix to each collection of caſes, a view of the general ſymptoms, and ſeat of the diſeaſe—and, to add, obſervations on the cauſes, and remarks on the hiſtories, detailed.

The firſt part of his taſk was ſufficiently eaſy. Not ſo the ſecond; for he felt it very difficult to fix upon a ſuitable arrangement; and beſides, ſo many caſes were in the original claſſed under erroneous titles, that it required much time to aſſign to each its proper rank *.

As he has long thought, in common with many others, that, in noſology, diſeaſes ought to be ſo claſſed, that thoſe which are ſimilar may be collected together, he adopted the arrangement

* Within a parentheſis added to each caſe, the number of the letter, and of the article under which it is placed in the original, is marked.

arrangement of Macbride; dividing diſeaſes into Univerſal, Local, Sexual, and Infantile. This method ſeemed more analogous to that of MORGAGNI, and better adapted to his facts, than any other.

In the tranſlation of the facts, the Editor has taken ſome liberties with the original, which perhaps may require an apology. He has omitted many of the little attending circumſtances mentioned by MORGAGNI; ſuch as the dates of the caſes, the names of the patients, &c.; and he has uniformly tranſlated the meaning, rather than the peculiar expreſſions. As to the former, he thought the dates, &c. little intereſting to the general reader; ſince they tend only to eſtabliſh the authenticity of the caſes, which ſeems quite unneceſſary. With reſpect to the latter, he has always conſidered it to be the duty of the tranſlator of a work, on any art or ſcience, to communicate the meaning of the original in the moſt accurate ſtyle of which

which language is ſuſceptible. This rule ſeemed peculiarly applicable to the work of MORGAGNI; for the ſtyle of the whole is exceedingly uncouth.

But he has ventured ſtill farther. In the original, many hiſtories are only partially detailed; detached parts of them being inſerted under different heads, and ſometimes even in other works of the author. Theſe he has brought together; his great aim having been to exhibit in a perſpicuous manner every fact detailed.

In his taſk as a tranſlator, the Editor thinks it incumbent on him to acknowledge the great aſſiſtance which he derived from the tranſlation by Dr. Alexander. It leſſened his labour, by ſerving as a ſketch.

The hiſtory of the general ſymptoms of each diſeaſe, prefixed to the reſpective caſes, has been compiled with care from ſuch ſources as ſeemed moſt authentic; and to theſe proper references are made.

The

The obſervations on the cauſes of diſeaſes, comprehend the moſt modern opinions; and with theſe the ideas of MORGAGNI are occaſionally incorporated. In this part of the work the Editor has endeavoured to ſay much in very few words; and on that account has avoided all minute reaſoning, and has contented himſelf with ſtating only the chief arguments on every ſubject. Where he has diſſented from others, he has expreſſed himſelf conciſely, and he hopes with becoming diffidence. In treating of the cauſes of diſeaſes, he has always wiſhed rather to diſcover the deliberation of a ſound judgement, than to diſplay the ſportings of a lively imagination. Though by the latter, the ignorant and unwary may be dazzled into admiration; it is upon the former alone, that the experienced and cautious will be inclined to depend.

The remarks he has added to the caſes, being confined ſtrictly to the explanation of the

the reſpective diſeaſes, are neceſſarily very ſhort in the volume now offered. In the ſubſequent part of the work, references to many of the caſes are occaſionally made, and additional obſervations upon them are introduced.

The Editor hopes to complete that part of the work, allotted to Univerſal Diſeaſes, within another volume; or, ſhould the materials be found incompreſſible into that ſize, he engages that it ſhall not exceed two volumes.

It is meant that the Local, Sexual, and Infantile Diſeaſes, ſhall be continued in a ſeparate publication, conducted on the ſame plan.

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PRELIMINARY OBSERVATIONS.

As nothing can be more prejudicial to the ſtudy of any art or ſcience than ambiguity in the language employed, it is neceſſary to premiſe, as an introduction to the following pages, the explanation of what is meant by the terms expreſſive of the different cauſes of diſeaſe.

The word Cauſe is, throughout the whole work, uſed according to the common acceptation of the term: Morgagni was no metaphyſician; and no more is the Editor of theſe pages.

The Cauſes of diſeaſe are divided into the *Prediſponent*, the *Exciting*, and the *Proximate*.

The Prediſponent cauſe, is that circumſtance, or combination of circumſtances, by which the body is rendered ſuſceptible of any particular diſeaſe.

The Exciting cauſe, is that circumſtance, on the application of which to the body diſeaſe follows.

The Proximate cauſe, is that circumſtance, or combination of circumſtances, from which the ſymptoms

ſymptoms of the diſeaſe ariſe. It is therefore the effect of the application of the exciting cauſe.

Theſe definitions may be illuſtrated by a familiar example.

Perſons who have a delicate habit and florid complexion, and at the ſame time a long ſlender neck and narrow cheſt, are much ſubject to a diſcharge of blood from the lungs. That particular conformation of the ſyſtem is therefore regarded as the prediſponent cauſe of the diſeaſe alluded to.

When in ſuch perſons violent paſſions of the mind are excited, or irregular action of the lungs takes place, or any accuſtomed evacuation is ſuddenly ſtopt, or the blood is circulated through the veſſels with undue force, or when they indulge in a larger than uſual proportion of food, and at the ſame time uſe leſs exerciſe, and a diſcharge of blood from the lungs enſues—One or more of theſe circumſtances is to be conſidered as the exciting cauſe or cauſes of the diſeaſe.

The effect of the application of theſe exciting cauſes to the ſyſtem of a perſon of that deſcription, is the laceration or diviſion of one or more blood-veſſels within the lungs; and hence ſuch laceration is deemed the proximate cauſe of the diſeaſe.

The prediſponent and proximate cauſe, therefore, muſt exiſt in the ſyſtem of the perſon affected; whereas

whereas the exciting may be ſome external circumſtance.

Although, in general, the application of the exciting cauſe produces no effect, unleſs the prediſponent previouſly exiſt; yet there are many exceptions to this rule. But the proximate cauſe can never take place, without being preceded by an exciting one.

A knowledge of the prediſponent and exciting cauſes of morbid affections enables the phyſician to prevent diſeaſes; and that of the proximate cauſe has been imagined neceſſary to direct him in the cure.

The prediſponent and exciting cauſes are in many inſtances eaſily aſcertained, and for a good reaſon, as they are diſcovered principally by obſervation. The latter are known by that means alone.

The proximate cauſe however cannot be aſcertained, without an intimate acquaintance with the ſtructure and functions of the human body.—But as ſuch knowledge is yet in a very imperfect ſtate, the proximate cauſe of diſeaſes is ſtill involved in ſo much obſcurity, that it is diſcovered only in thoſe diſorders which are ſeated in a ſingle organ, and in ſome particular part of the ſtructure of that organ.

SCHOOL OF MEDICINE

UNIVERSAL DISEASES.

CHAPTER I.

FEVERS.

SECT. I. *CONTINUED FEVER.*

§ 1. CONTINUED INFLAMMATORY FEVER.

ACCORDING to Dr. Cullen's definition, Continued Inflammatory Fever, or what he calls Synocha, is that where, along with the general character of pyrexiæ, the heat of the body is very much increaſed; the pulſe is frequent, full, and hard; the urine is red; the functions of the brain are but little deranged; and there is no primary local diſeaſe.

As this fever occurs very ſeldom, if ever, in this part of Great Britain, the deſcription of its ſymp-

toms is neceſſarily taken from foreign authors, or from thoſe who have copied from them *.

This fever is uſhered in by ſlight rigors †, without any previous languor or ſigns of debility. The tongue is white and dry, attended with a bad taſte in the mouth and thirſt. The ſenſe of ſmelling is impaired, and nauſea is felt. A hot fit very ſoon ſucceeds; the pulſe, which before had been ſmall and depreſſed, becomes full, ſtrong, and hard; and the heat of the body is ſo much increaſed, that it is equal to a degree not under 106 of Farenheit's ſcale, and ſometimes exceeds that degree conſiderably. The face is much fluſhed; the eyes are inflamed, and impatient of bearing light. Headach, and ſometimes pain of the back, take place. The tongue is black and parched, and the thirſt continues exceſſive. The urine is high coloured, and the belly is coſtive. The breathing is generally laborious; and is ſometimes attended with a ſhort cough.

In favourable caſes, a ſweat breaks out after the hot fit; and the diſeaſe is thereby carried off within twenty four hours from its commencement. In other caſes, the ſkin continues hot and dry; laborious

* Vide Junker Conſpect. Therap. Special. pag. 484. Lommii Medicinal. Obſervat. p. 7. Liddelii Opera, p. 78. Eller Obſervat. de cognoſcend. et curand. Morbis, p. 62. Home Princip. Med. p. 76. Meza Compend. Med. Pract. § 128, &c. Oſterdyk Præcept. Med. Pract. p. 38.

† Junker and Lommius allege that it is not preceded by rigors, but invades ſuddenly with great heat.

laborious breathing and headach remain unabated; reſtleſsneſs or very diſturbed ſleep ſupervenes, attended with tinnitus aurium, and the appearance of motes floating before the eyes; and theſe ſymptoms are ſucceeded by delirium. In ſuch caſes, it ſometimes happens that a double pulſation in the arteries can be perceived. Epiſtaxis, preceded by increaſed pain in the head and tinnitus aurium, violent throbbing at the temples and itching of the noſe, ſometimes occurs about the fourth or ſeventh day, and proves critical. The criſis, in other caſes, is by urine, vomiting, ſweating, or diarrhœa. If, however, yellowneſs of the ſkin appear before the ſeventh day, or if delirium, coma, or convulſions take place within the ſame period, the diſeaſe terminates fatally.

During the courſe of this fever, the pulſe continues quick, full, and hard, until towards the criſis or termination of the diſeaſe. In favourable caſes, it ſeldom exceeds one hundred and twenty or one hundred and thirty pulſations in a minute. The ſtate of the tongue varies from being white and dry to a black colour, and to ſo great a degree of dryneſs that it is ſometimes cracked. The urine, at firſt high coloured and in ſmall quantity, becomes either natural, or in large quantity with a copious ſediment, or bloody, or black and fetid, according to the nature of the event of the diſeaſe. The belly either continues obſtinately coſtive, or

diarrhœa occurs. Night exacerbations are pretty diſtinctly marked. Great anxiety and deſpondency generally attend. Ulcers and iſſues, it is ſaid, during the courſe of this fever, are dried up; and aſſume an inflamed appearance. Blood drawn during the diſeaſe is ſizy.

This fever ſometimes terminates in inflammation of the lungs. Perſons under forty years of age are the moſt ordinary ſubjects of this diſeaſe; but, as the ſucceeding caſes ſhow, perſons much beyond that age are not exempted from it.

The appearances on diſſection, where inflammatory fever terminates fatally, generally exhibit effuſions within the cranium, a determination of blood to the veſſels of the head, and ſometimes even ſuppuration within the brain.

From the ſymptoms of the diſeaſe, and from the appearances on diſſection, it is probable that the ſeat of inflammatory fever is the ſanguiferous ſyſtem.

CASES OF CONTINUED INFLAMMATORY FEVER.

Case I. (x. 17.)

A young man, aged twenty five years, by trade a wool-comber, affected with continued fever, became ſo delirious that it was neceſſary to bind him.

The

The delirium having remitted, he was brought into the hoſpital of Padua. Immediately on his admiſſion, convulſive motions of his ſuperior extremities, and ſubſultus tendinum at the wriſts, were obſerved. Veneſection having been ordered, the blood exhibited no inflammatory cruſt; but its ſubſtance was denſe and compact. He became quite comatoſe; and, having ſpoken none for the laſt three days, died.

Appearances on Diſſection.

THORAX. Nothing remarkable was obſerved, in this cavity, except that one of the lobes of the lungs was hard. In ſeparating the fifth dorſal vertebra from the ſixth, a conſiderable quantity of fluid flowed out from the ſpinal tube. When the veſſels in the neck were divided, much blood of a black colour was diſcharged.

HEAD. When the cranium was ſawed through, a ſmall quantity of fluid, ſimilar to that in the ſpinal tube, iſſued out. The upper part of the cranium and the portion of the dura mater under it being removed, the veſſels of the pia mater, on the poſterior part of the left hemiſphere of the brain were obſerved to be diſtended with black-coloured blood. Under the pia mater a kind of jelly was ſeen in ſeveral places, with air bubbles intermixed, although no bad ſmell was perceived in any part of the body; and it was not probable that, at that ſeaſon of the year, a body ſhould become putrid

trid within leſs than three days after death. The ſubſtance of the brain, when cut into, was found to be very hard; bloody points appeared throughout its medullary ſubſtance, which forming immediately into large drops of blood, afforded ample proof of the preſence of much fluid blood. The lateral ventricles contained ſcarcely any ſerous fluid; they were ſhorter than uſual. The plexus choroides were of a black red colour. The pineal gland was of a roſy colour; its anterior and poſterior ſurfaces were not depreſſed, as they uſually are, but rather turgid and full. It was very hard, and when cut into was found to contain ſeveral ſmall calculi as it were. One of theſe reſembled a millet ſeed, both in magnitude and form; but was of the hardneſs of bone, and ſeemed alſo, from the ſmell which it emitted when applied to the flame, to be of an oſſeous nature. The ſpinal marrow was accurately examined from its origin down to the fifth dorſal vertebra. All the veſſels of the continuation of the pia mater, eſpecially thoſe on the poſterior ſurface, were ſo much diſtended with blood that they reſembled veſſels which had been injected with red wax. The ſanguiferous veſſels which accompany the ſpinal nerves, eſpecially ſome of theſe nerves, were alſo obſerved to be diſtended with blood.

CASE

Case II. (1. 12.)

A young woman, the wife of an indigent man, and the daughter of a woman ſubject to epilepſy, in conſequence of being overheated after a journey, (in the month of February), was affected with a violent pain in the head and an ardent fever. Theſe ſymptoms continuing, ſhe died within the ſpace of three or four days, having had no delirium, but having been often reſervedly ſilent. When affected with the diſeaſe, ſhe gave ſuck, and at the ſame time had the catamenia. For theſe reaſons blood-letting had been delayed ſo long, that when, from the ſymptoms becoming worſe, although the pulſation and ſtrength of the arteries continued firm, half a pound of blood was drawn from the foot, it ſo happened that ſhe immediately expired. The blood inſtantly coagulated very ſtrongly.

Appearances on Diſſection.

Head. The inſide of the ſkull was of a brown red colour. The external ſurface of the pia mater on the upper part of the brain was covered with a yellowiſh fluid, in no great quantity, but ſpread equally over it. Its conſiſtence was ſomewhat thick; and, although perfectly inodorous, it had altogether ſuch an appearance that it ſeemed to be really purulent matter. The cerebrum was diſcoloured; but no mark of diſorder could be perceived in the menin-

ges

ges or brain, nor could any traces of the origin of the pus be diſcovered.

Case III. (lxii. 5.)

A Scaffenger, apparently aged about fifty years, of a robuſt habit, and of a healthy appearance, but rather plethoric, and addicted to drunkenneſs, was employed, along with his ſervants, in cleaning out the jakes of an hoſpital, at an unſeaſonable hour of the night, a time which is generally choſen for ſuch buſineſs. As they were neceſſarily going to and fro, the maſter himſelf being left at one time alone, imagined that he ſaw a ſpectre clothed in white, and was immediately affected with univerſal tremor, while at the ſame time his mouth was diſtorted. In this ſtate he was found by his ſervants, who carried him inſtantly to bed. Antiſpaſmodics and cordials were immediately given; and the tremors having remitted, and the pulſe become ſtrong, half a pound of blood was drawn from his arm that night. In the morning, as much blood was taken from the other arm; for the tremors had remitted completely, and the pulſe had become more full and febrile. On the following day alſo a vein was opened in the foot, as ſome alleviation of the ſymptoms, though for a ſhort ſpace of time, was perceived after each bleeding. The blood, eſpecially in the firſt bleed-

ing, came out in a frothy ſtate, of a very black colour; the craſſamentum was rather hard, and the ſerum in ſmall quantity. The fever however continued; and, inſtead of the tremulous convulſive motions with which he had at firſt been affected, his whole body, from time to time, was agitated with violent tonic convulſions. He could not ſpeak intelligibly, nor had he done ſo from the time that he had related to his ſervants what had happened to him. It was evident, however, that he knew the perſons who were about him, and could diſtinguiſh them from one another. When he was able, he ſignified, by means of geſtures, that he was affected with a very ſevere pain in the head. In conſequence of theſe ſymptoms, to alleviate which ſeveral external and internal remedies, beſides thoſe mentioned, were in vain employed, he died, within ſix or ſeven days from the commencement of the diſeaſe.

Appearances on Diſſection.

EXTERNALLY. The penis and ſcrotum were of a black colour, but the ſkin only was affected; the fingers were very rigid, but not the arms.

ABDOMEN. When the omentum, which had very little fat, was removed, the colon, in its whole extent diſtended with air, though not immoderately, was obſerved to follow ſuch a direction, that, after having aſcended to the liver, it deſcended from that to two or three inches below the na-

vel on the right ſide; and having returned from that to its ordinary ſituation, which it retained as uſual in going acroſs under the ſtomach, lying in an oblique direction in the left ſide of the left hypochondriac region, and in a ſtraight direction over the whole anterior ſurface of the left kidney, it again returned into the ſame hypochondre, and deſcending from thence, and entering the pelvis, it terminated on the rectum without any previous flexure. The ſmall inteſtines, except ſome tracts of them, eſpecially a conſiderable portion of the ileum which lay very low in the pelvis, were diſtended with air. A yellow colour with which they were internally tinged, was ſeen through their coats; for the bile, with which the gall-bladder was almoſt filled, had by exudation made the contiguous inteſtines externally yellow, and by flowing into them had rendered their internal ſurfaces of the ſame colour. The liver and ſpleen were of a leaden colour; but although at the edge of the former viſcus that colour was deeper, it did not in either extend beyond the ſurface. The ſpleen was of a moderate ſize; the liver was large; but both were ſound.

Thorax. The lungs ſcarcely adhered to the pleura: In the few places where they did, it was at the poſterior part. They were rather turgid; there appeared, in ſome places, pretty large veſications ſomewhat raiſed above the other parts of

the

the ſurface; a kind of veſicles, as it were, ſeemed evidently to be included in theſe. There was no intermediate lobe on the right ſide, but the appearances were the ſame on it as in the left. The pericardium did not contain a ſingle drop of fluid; its internal ſurface was ſtill moiſt, ſo that it did not adhere to the heart, except very ſlightly in ſome places. In the heart there was almoſt no blood. This might perhaps happen from the blood having flowed out, in conſequence of the large veſſels below the diaphragm having been cut through, eſpecially as the blood had been found fluid in ſeveral parts of the body. Two polypous concretions, however, were found in the heart. One of theſe extended from the right auricle into the vena cava ſuperior; the other, which was ſomewhat more remarkable, being round, and thicker than one's little finger, alſo extended from the right ventricle into the pulmonary artery.

Head. Nothing remarkable appeared when the cranium and dura mater were cut through. But the veſſels of the pia mater were ſo full of blood, that the ſmalleſt trunks ſeemed as if filled by injection. The veſſels of the ventricles, and within the medullary ſubſtance of the brain, were alſo diſtended; and when the beginning of the ſpinal marrow, which had been taken out together with the medulla oblongata, was gently compreſſed, blood was obſerved to iſſue out, not only from the

fiſſure in its medullary ſubſtance, but alſo from the ſection of the cineritious ſubſtance which was neareſt the fiſſure. A conſiderable quantity of limpid fluid was obſerved in both lateral ventricles; but the plexus choroides were red. No veſicles were perceived on them as there uſually are, but ſeveral very ſmall red particles, which were ſolid ſo as to ſeem glandular, were obſerved. The cerebrum and cerebellum were of the natural firmneſs. The fornix was flabby, as was alſo the internal ſurface of the trunk and crura of the medulla oblongata. A portion of the ſurface of the anterior lobes of the cerebrum, at the middle of the higheſt part where they are contiguous to each other, was ſo formed, that the one lobe was received into a hollow of the other. The remaining part of their ſurface was convoluted in the ordinary manner.

Case IV. (vii. 17.)

An old woman was affected with a ſlight fever, which her phyſician hoped to have removed by the uſe of Peruvian bark. It did not, however, yield to this treatment; but, on the contrary, having become an acute fever, attended with ſlight wandering of the mind, ſhe died.

Appearances on Diſſection.

Abdomen. Two ureters proceeded from the right

right kidney; the ſuperior one was ſmall, ariſing from a very ſimple pelvis; the inferior was thicker, as it proceeded from a pelvis which was rendered larger and more prominent, in conſequence of many tubuli terminating in it. The progreſs and inſertion of each ureter was as diſtinct as their origin; for the orifices of both opened at the diſtance of about a finger's breadth from the other into the bladder, in the ſame oblique direction as uſual, in ſuch a manner that the one was above the other. In the ſuperior and poſterior part of the fundus uteri an excreſcence of a round form, and externally of a bloody colour, was found extending from the right ſide towards the left. Nearly a third part of its circumference, at the inferior and left ſide of it, was ſeparated from the uterus ſo that it could be raiſed by the probe; the remaining portion was intimately connected with the uterus, and indeed ſeemed to be compoſed of the ſame ſubſtance; but, when cut into, it was found to be throughout of a paler colour, and harder and more compact. This was certainly the beginning of a ſcirrhus, or perhaps of an occult cancer in the very mildeſt ſtate. It was flat, ſmooth, and ſo ſmall that it could be covered with the firſt joint of one's thumb when extended. From the ſtructure of the ſurface contiguous to the cervix uteri, and the appearance of the hymen, the edges of which were not broad, but were entire, it was evident

evident that the woman had had very little if any commerce with man.

THORAX. In the heart a kind of membrane, perforated like a ſieve, or of a ſtructure reſembling net-work, was found to occupy the place of the valve of the coronary vein. Incipient oſſifications, of a white colour, were ſeen in the internal ſurface of the aorta, a little above the ſemilunar valves, and at that part placed at the lumbar vertebrae.

HEAD. The brain was accurately examined; but nothing deſerving notice appeared, except that the veſſels of the pia mater were diſtended with blood. That membrane, it may alſo be obſerved, was eaſily ſeparated from the brain in every place; and conſequently, although little fluid was ſeen, it was evident that there muſt have been ſome.

CASE V. (XI. 22.)

A WOMAN who had formerly had an apoplectic paroxyſm, was again affected with the ſame diſeaſe, and afterwards remained in a ſtupid and ſemiparalytic ſtate. Within one or two months from that period ſhe became affected with fever, which was very violent; as the ſtate of the pulſe and the great thirſt plainly indicated. Of this ſhe died in the hoſpital of Bologna.

Appearances

Appearances on Diſſection.

THORAX. A polypous concretion was found in each ſide of the heart. That on the left had ſeveral branches; its trunk was more firm than that in the other ſide: externally it appeared ſurrounded with a tendinous ſubſtance; and internally its ſubſtance reſembled that of firm compact fleſh.

HEAD. The veſſels of the cerebrum were in ſome degree turgid with black blood. The ſubſtance of the brain was ſo ſoft, that when in ſome places the dura and pia mater were drawn off, the cortical ſubſtance followed. A ſmall quantity of watery fluid was found in the third ventricle.

CASE VI. (VII. 7.)

A MAN, aged thirty-five years, was affected with a violent fever. He became delirious; his eyes gliſtened; and his pulſe was quick and ſtrong. At laſt he died.

Appearances on Diſſection.

HEAD. The blood veſſels of the brain were turgid from the contained blood. In the ventricles a ſmall quantity of ſerous fluid was found. The brain was in a ſound ſtate.

The blood in every part of this body was fluid, except in the heart, in which ſome polypous concretions were obſerved.

Case VII. (ix. 12.)

A man, by trade a cook, formerly ſubject to diſeaſes of the urinary paſſages, affected violently with continued fever, was received into the hoſpital at Bologna. Having been bled, the blood became ſo much coagulated that it adhered ſtrongly to the ſides of the glaſs veſſel in which it was kept; and all the ſerum, which was in ſmall quantity and bloody, was forced out on its top. He continued to grow worſe, eſpecially at night. About the twelfth day of the fever epileptic paroxyſms ſupervened, and he died.

Appearances on Diſſection.

Abdomen. One of the kidneys was round: it reſembled ſomewhat a cancer, and contained calculi. The other kidney was twice as large as uſual, probably from its performing the office of both.

Thorax. The pleura was inflamed. The heart and large veſſels were diſtended with very black blood; which was very fluid, and ſtill warm, although ten hours after death.

Head. All the veſſels which creep over the ſurface of the brain appeared very red and exceedingly turgid. A ſmall quantity of watery fluid, clear as lymph, was found in the ventricles.

Case

Case VIII. (xlix. 10.)

A woman, aged twenty-five years, of a bilious temperament, affected with difficulty of breathing, was admitted into the hospital of Bologna. Along with the difficulty of breathing, she complained of pain in the left side of the thorax; within which, during respiration, a sound like that of matter was distinguished. Her pulse was quick, though soft. On the fifth day from the date of her admission, the jaundice supervened; and after having continued till the eighth day, it disappeared. At this time, from the obstinacy of the fever, blood letting, which had been employed on the first days of the complaint, was again had recourse to. Although the fever was not then so violent as to threaten death, she died suddenly.

Appearances on Dissection.

Abdomen. Every thing within the abdominal cavity appeared sound, except that it contained half a pound of watery fluid; a circumstance by no means uncommon.

Thorax. The right lobe of the lungs, which adhered to the ribs at its upper part, was at its lower part inflamed; and when its substance was there cut into, a little serous fluid was discharged. The left lobe was totally unconnected with the pleura, and was perfectly sound. A polypous

concretion extended from the right ventricle of the heart (in the muſcular fibres of which its baſis was placed) into the vena cava. It was of a firm ſtructure; and its colour was at one part pale, and at another red.

Case IX. (xxxviii. 22.)

A woman, about thirty years of age, after long continued pains in the joints, became affected with a very copious, moiſt, ſcabby eruption. In order to repel this, ſhe uſed ſome kind of ointment, by the advice of an empyric. By this means, the eruption was indeed dried up within a ſhort time; but an acute fever, attended with great heat, with thirſt, and with moſt excruciating pains in the head, was the conſequence. To theſe ſymptoms, delirium, great difficulty of breathing, ſlight ſwelling of the whole body, and conſiderable ſwelling of the abdomen, together with much reſtleſsneſs, ſupervened. On the ſixth day from the time that the fever had forced her to keep bed, ſhe died.

Appearances on Diſſection.

Abdomen. When the belly, which was ſwelled and very tenſe, was opened, inſtead of water, the inteſtines and ſtomach burſt out. Theſe contained nothing but air; with which they were ſo much diſtended that the ſtomach filled more than half of

of the abdominal cavity. In that cavity, about a pound or more of limpid ſerum was found effuſed; which when expoſed to the fire, ſeemed at firſt to be ſlightly coagulated, but afterwards, like the fluid of the pericardium, was entirely evaporated, leaving only a kind of yellow pellicle at the bottom of the veſſel.

Thorax. The lungs adhered to the pleura by ſuch a number of membranous ſubſtances reſembling a gelatinous body, that it appeared they could not have been dilated ſo freely as uſual. When theſe membranous ſubſtances were cut into, a pellucid fluid was diſcharged. The heart at the right ſide was connected with the pericardium by ſome membranous fibres. Its ventricles contained ſome fluid blood; and in the right ventricle, the beginning of a ſmall polypous concretion was obſerved.

In the diſſection of the body, it was found that, when the ſkin and fleſh were cut into, no watery fluid was diſcharged; from whence it was evident that the univerſal ſwelling, mentioned in the hiſtory of the caſe, did not proceed either from œdema or from anaſarca. A circumſtance which was alſo confirmed by the feet not having pitted upon preſſure.

Case X. (lv. 10.)

A woman, aged forty years, addicted to the uſe of tobacco and wine, who had been married to a robuſt man, by trade a porter, but had never had any children, having been affected with a ſcabby eruption, had repeatedly drank ſulphur mixed in wine, with a view to get rid of it. Having at laſt taken a larger than uſual quantity of the ſame medicine, ſhe began immediately to feel indiſpoſed, and vomited repeatedly. She was ſoon after brought into the hoſpital at Padua, and was then feveriſh; had a hard and ſmall pulſe, and complained of great difficulty of breathing. Veneſection was performed, and freſh drawn oil of almonds was given. During the ſucceeding day, as the difficulty of breathing was ſtill more conſiderable, blood was again taken away; which, like that formerly drawn, had a firm compact craſſamentum, but was not covered with any cruſt. Two cups-full alſo of milk were given when the cauſe of the diſeaſe was learned. The difficulty of breathing, however, having increaſed, evident convulſions of the extremities having ſupervened, and the pulſe having become more languid, ſhe died about the fourth day from the beginning of the diſeaſe.

Appearances

Appearances on Diſſection.

EXTERNALLY. The body was in good condition, except that the ſkin was here and there deformed with a ſlight ſcabby eruption.

ABDOMEN. The belly was ſwelled; not from too great a proportion of fat, for that was both in proper condition and in proper quantity; nor from the extravaſation of watery fluid, for, although there was ſome effuſed fluid, it was entirely confined to the pelvis; but from the ſtomach, the ſmall inteſtines, and conſiderable tracts of the colon, being diſtended with air. The colon, in other parts, either preſerved its natural width, or was very much contracted, as was obſerved in the left ſide near the ſtomach. The omentum covered none of the inteſtines, as it was forced upwards or retracted; both it, and that ſuperior portion of the meſocolon which ſupports the tranſverſe arch of the colon, were rigid, and were here and there, eſpecially on the poſterior part, marked with red ſpots. On the external ſurface of the ſtomach, the blood veſſels were ſomewhat turgid. On the internal ſurface, at the fundus, near the antrum pylori, there was an area of a circular form, the diameter of which was about four fingers breadth. It was diſtinguiſhed from the remaining ſurface of the ſtomach by being leſs ſmooth and leſs ſhining, but more white, and being furniſhed with blood-veſſels, which were black, as if from injection; whereas the remainder

mainder was more ſmooth, more ſhining, and leſs white in colour; and exhibited almoſt no veſſels, at leaſt none ſo diſtinct or black. The internal coat of the ſtomach appeared eroded throughout the whole extent of the area. Except in that part, no mark of eroſion or inflammation could be traced, either in the ſtomach, or in the adjoining part of the œſophagus or inteſtinal canal. The ſtomach was larger than ordinary; it had no rugæ; its parietes were very thin; and it ſcarcely retained any veſtige of the ring of the pylorus. This latter circumſtance, if it did not proceed from original conformation, or from ſome former diſeaſe, might be owing, as the others were, to the frequent diſtenſions which muſt have taken place from drunkenneſs, and alſo to the late diſtenſion from the included air. The gall-bladder was contracted, and contained a very little bile. The kidneys were flabby; and the aorta was ſmaller than uſual. The ovaria were even ſmaller and more ſhrivelled than they are at that age. A hydatid, of the bulk of an ordinary ſized grape, adhered to the left ovarium. The uterus was inclined to the right ſide; its fundus was rather ſmall. The cervix, eſpecially at the lower part, was thicker than uſual; and the os uteri was ſmall and of a circular form, as in virgins. From this a fluid ſimilar in colour and conſiſtence to milk, which was not fetid, and not in very ſmall quantity, diſtilled; from this it appeared

that the woman had laboured under fluor albus. The ſource of this fluid was found to be higher than the lower part of the cervix. At that part the veſicles of the cervix contained mucus, probably more fluid than uſual, but not like milk. None however were obſerved higher up. About the middle of the cervix, a round empty cell, capable of containing a ſmall French bean, was found in two places buried within the ſubſtance of the parietes, which exhibited no marks of eroſion either there or in any other place.

Thorax. The vertebræ of the thorax were bent to the right ſide much more than uſual, which proved that the woman had been hump-backed; a circumſtance that had been indicated by the lumbar vertebræ having appeared to have begun to incline to the left ſide, but ſo ſlightly that the innominata were not affected by it. No fluid was found effuſed in the thorax or pericardium. The lungs anteriorly, and at the ſides, were very ſtrongly connected to the pleura; they were beſides tumid, and eſpecially the left lobe, but only in conſequence of air and a little fluid mixed with it. They were no where indurated, nor of a redder colour than natural. The ventricles of the heart contained coagulated blood of a black colour, as it was in the other parts of the body.

Head. All the the contents of the cranium appeared more flabby than uſual, although they were

were examined within eight days after death. The veſſels of the pia mater were turgid with blood. A number of veſicles filled with watery fluid, and not very ſmall, were obſerved in the choroid plexuſes. All the contents of the cranium having been removed, that ſurface of both the petrous proceſſes which is next the brain, and the parts contiguous to it, were found to be unequal, and not ſmooth as uſual.

CAUSES OF CONTINUED INFLAMMATORY FEVER.

PREDISPONENT CAUSE. Although plethora, however induced, be evidently a neceſſary prediſponent cauſe to this fever, it does not appear to be aſcertained whether ſome other circumſtance be not alſo required.

EXCITING CAUSES. Sudden tranſitions from heat to cold, ſwallowing cold drinks when the body is heated, exceſſive exerciſe, intemperance, violent paſſions of the mind, the ſudden ſuppreſſion of habitual evacuations, the ſudden repulſion of eruptions, and what the French call a coup de ſoleil, are probably the ſole exciting cauſes of this diſeaſe. That this fever never originates from perſonal infection is generally allowed; and the accounts of its

its having occaſionally appeared as an epidemic * are too vague to be credited †, and even, although proved, could afford no deciſive evidence that it was occaſioned by contagion.

Proximate Cause. Many modern phyſicians have conſidered all fevers to be produced by the ſame proximate cauſe ‡, and their opinion is now very generally received. Waving for the preſent the conſideration of this ſubject, it may be obſerved, that the theories reſpecting the proximate cauſe of fever which have of late years prevailed, do not explain that of continued inflammatory fever.

The firſt of theſe theories is that of Boerhaave. He imagines that, in conſequence of lentor of the blood, there is a ſtagnation and reſiſtance in the extreme veſſels; while, at the ſame time, the heart is irritated into irregular action from an inordinate motion of the nervous fluid into it §. Beſides which, he ſuppoſes that, during the courſe of the

* Vide, An Enquiry into the Nature, Riſe, and Progreſs of the Fevers moſt common in London, by Wm. Grant, M. D. page 193; and Sydenham's Works, paſſim.

† Vide, Collection d' Obſervations ſur les Maladies et Conſtitutions Epidemiques, par M. Lepecque de la Cloture, pag. 836.

‡ Vide, The Works of Dr. Cullen; and Obſervations on Fevers, by Dr. Clarke of Newcaſtle.

§ Vide, Aphor. Boerhaavi, 581, 598; et Van Swieten Comment. in locis.

fever, ſuch a change in the fluids, as their becoming very thick, acrimonious, &c. may take place, as ſhall vary the type of the diſeaſe *.

Several circumſtances contradict this theory. *Firſt*, An inordinate motion of the nervous fluid is ſo vague an expreſſion, that it is not eaſy to underſtand what is meant by it. *Secondly*, No ſatisfactory proofs have been produced, to render it certain that the ſtate of the fluids is altered at the beginning of inflammatory fever; while, at the ſame time, many facts make it probable that the change in the blood is the conſequence, and not the cauſe, of the increaſed action of the vaſcular ſyſtem. And *Thirdly*, The determination of blood to the head, ſo general in this fever, is not explained by this theory.

The ſecond opinion was originally ſuggeſted by Hoffman †, and has ſince been improved by Dr. Cullen. He alleges that, by the application of the remote cauſes of fever, the energy of the brain is diminiſhed, and debility of the whole of the functions, and particularly of the action of the extreme veſſels, is produced: that the nature of the animal oeconomy is ſuch, that this debility proves an indirect ſtimulus to the ſanguiferous ſyſtem; whence, by the intervention of the cold ſtage and ſpaſm

* Vide Aph. 592, 593.

† Hoffmanni opera omnia, tom. ii. pag. 10.

ſpaſm connected with it, the action of the heart and larger arteries is increaſed; and continues ſo till it has had the effect of reſtoring the energy of the brain, of extending the energy to the extreme veſſels, of reſtoring therefore their action, and thereby eſpecially overcoming the ſpaſm affecting them; upon the removing of which the excretion of ſweat, and other marks of the relaxation of the excretories, take place *.

This theory does not explain the proximate cauſe of inflammatory fever, for the following reaſons: *Firſt*, Becauſe, according to his own definition of the diſeaſe, the functions of the brain are little diſturbed. *Secondly*, Becauſe debility is generally more conſiderable at the end than at the beginning of the paroxyſm. And *Thirdly*, Becauſe in inflammatory fever the hot fit is violent, although the cold fit be ſlight; whereas, were Dr. Cullen's theory true, the hot fit ſhould always be in proportion to the preceding cold one.

Theſe theories being found thus inadequate to the explanation of the proximate cauſe of this diſeaſe, it might be expected that ſome other ſhould be here ſubſtituted: but it is much eaſier to overturn than to eſtabliſh theories. The following obſervations therefore are offered merely as ſuggeſtions, deſigned only to afford a few imperfect hints.

* Vide Firſt Lines, par. 46.

The propenſity of medical authors to attribute complex and contradictory phenomena to a ſingle cauſe, has been highly prejudicial to the progreſs of medicine. It is probable that the different ſpecies of fevers proceed from different proximate cauſes; and hence, in the inveſtigation of the cauſe of each, the phenomena peculiar to each ſpecies, and not thoſe common to all, ought to be conſidered. This is the more particularly neceſſary, as all diſeaſes conſiſt of primary and ſecondary ſymptoms; for no part of the body can be deranged without other parts being affected. As a preliminary ſtep, therefore, to the inveſtigation of the proximate cauſe of inflammatory fever, it is neceſſary to aſcertain the primary ſymptoms. Theſe appear to be, violent action of the ſanguiferous ſyſtem, and increaſed heat of the whole body. All the other ſymptoms ſeem to be ſecondary. An exception indeed may be urged in favour of the cold fit; but as that ſymptom is not only common to all fevers, but alſo ſometimes perhaps is wanting in inflammatory fever, it cannot be regarded as a primary one. Beſides, it may appear to ſome, that increaſed heat of the body ſhould not be ſtated as a primary ſymptom, from its being probably the conſequence of the increaſed action of the vaſcular ſyſtem. There is, however, ſome ambiguity in this circumſtance;

for increaſed heat of the body, or at leaſt of particular parts of it, is ſometimes felt independent of increaſed action of the ſanguiferous ſyſtem. As the primary ſymptoms of the diſeaſe cannot be very clearly aſcertained, an attempt to explain thoſe mentioned might not perhaps be deemed very ſatisfactory.

It is well known that, in a ſtate of health, expoſure to any of the exciting cauſes of inflammatory fever produces a train of ſymptoms reſembling thoſe of that fever, which in a few hours ſpontaneouſly ceaſe by the eruption of ſweat. To what circumſtance then ought the permanent increaſed action of the vaſcular ſyſtem in inflammatory fever to be attributed? Can the plethoric ſtate of the ſyſtem, previous to the application of the exciting cauſe, account for the difference in the degree of violence and duration of theſe ſymptoms in the two caſes?

With reſpect to the ſecondary ſymptoms, that which it is moſt difficult to explain is the cold fit. As for the reaſons already ſtated, it ought to be conſidered as an acceſſary, and not a neceſſary ſymptom: it cannot be regarded as depending ſolely on the action of the exciting cauſes. That it depends upon the diminiſhed action of the veſſels on the ſurface of the body is very evident; but whether this proceeds from the action of cauſes applied immediately to the ſanguiferous ſyſtem itſelf,

itſelf, or mediately through the nervous ſyſtem, is not eaſily determined.

That the deviation from nature in the appearance of the blood is the conſequence of the increaſed action of the veſſels has been generally admitted. Yet it is probable that it is not owing excluſively to that circumſtance.

The determination of blood to the head ſo obvious, not only from the ſymptoms, but alſo from the appearances on diſſection, deſerves particular notice, as it may perhaps afford a clue to the labyrinth in which the proximate cauſe of inflammatory fever has been hitherto concealed.

REMARKS ON THE CASES OF INFLAMMATORY FEVER.

THOSE caſes prove decidedly, in contradiction to the aſſertions of many medical practitioners, the exiſtence of inflammatory fever, as deſcribed in the preceding pages from the writings of authors.

The third, fourth, and fifth caſes, ſhow that this fever does not occur excluſively in perſons under forty years of age; and that it is not, as has been alledged by ſome, confined to cold climates, as all of them occured in Italy.

The eighth caſe affords a ſtriking illuſtration of the

the obſervations of Lommius, reſpecting the danger of yellowneſs of the ſkin, when it occurs before the ſeventh day; and alſo reſpecting the tendency of this fever to terminate in inflammation of the lungs.

§ 2. NERVOUS FEVER, OR TYPHUS.

AS this fever appears under a variety of forms, it has been divided by authors into various ſpecies. Unleſs this plan were adopted, an accurate deſcription of its ſymptoms and types could not be given.

I. SLOW NERVOUS FEVER, or TYPHUS MITIOR *. This does not, like the inflammatory fever, invade ſuddenly. The patient at firſt feels liſtleſs and oppreſſed; his appetite for food is diminiſhed; he is reſtleſs; has great dejection of ſpirits; feels an unuſual wearineſs after the leaſt motion; and has alternate chills and ſhiverings, with ſudden fluſhes of heat. A lucid interval generally takes place

* The ſymptoms of this fever are detailed more accurately by Huxham, p. 74, than by any other author. The deſcription here given is borrowed chiefly from him.

place in the morning, but all the ſymptoms are aggravated at night; and this circumſtance continues, in a greater or leſs degree, throughout the progreſs of the diſeaſe. After two or three days, vertigo, or pain of the head, eſpecially about the hinder part, attended ſometimes with a ſenſe of coldneſs in the courſe of the coronary ſuture; nauſea, with the vomiting of inſipid phlegm, and great proſtration of ſtrength, eſpecially felt when the erect poſture is attempted, ſupervene. At the ſame time, the heat of the body is not conſiderably increaſed; the pulſe is quick, weak, and irregular; the tongue is moiſt, white, and covered with a viſcid mucus; the breathing is difficult, accompanied with oppreſſion about the præcordia; the urine is pale, watery, and ſometimes like whey; the belly is generally coſtive. Inſomnolency takes place; and although ſometimes the patient appears to be aſleep he is quite unconſcious of it. All theſe ſymptoms are attended with great inability to exert the powers of the mind or of the body.

In this ſituation the patient continues for ſome days; the ſymptoms then become aggravated; the face is ſometimes hot and fluſhed when the feet are cold, and at the ſame time cold ſweats on the forehead and on the backs of the hands break out. Tinnitus aurium takes place, and may be regarded as the forerunner of delirium. Deliquia often

often occur, eſpecially if the erect poſture be attempted. If at this period of the diſeaſe the urine continue clear and watery, delirium with ſubſultus tendinum enſue. The delirium is ſeldom violent, appearing at firſt when the patient awakes like the continuance of a dream; from which ſtate the patient recollects himſelf for a little; but the confuſion ſoon returns, and from this he cannot for ſome time be rouſed. At laſt he continues in a conſtant dozing muttering ſtate. Profuſe ſweats or colliquative diarrhœa ſucceed; the patient is quite ſtupified, and inſenſible to the impreſſions of both light and noiſe, although at the beginning he had been remarkably ſuſceptible of ſuch impreſſions. Great exhauſtion now takes place; the tongue, which is dry, eſpecially in the middle, trembles when the patient puts it out; the extremities are cold; the nails of the fingers are livid; the pulſe flutters, is ſo indiſtinct as ſcarcely to be felt, and is eaſily compreſſible. Trembling and twitching of the hands ſometimes occur, and are the preludes to ſtrong convulſions which ſnap the thread of life. In other caſes, the ſenſes of ſeeing and hearing are completely loſt; the delirium is converted into coma; the ſtools and urine paſs involuntarily; ſubſultus tendinum ſupervene; a particular noiſe in the throat, emphatically called rattling in the throat, is heard; and the patient ſinks. This fatal termination moſt

generally happens about the fourteenth day, ſeldom before the eighth or ninth, nor after the thirtieth.

The termination of this fever is very uncertain; and it is impoſſible, at the beginning, to judge whether recovery or death ſhall happen: For ſometimes, after the ſymptoms have been quite ſlight, a ſudden aggravation takes place, and the patient is cut off; while, in other caſes, the moſt alarming ſymptoms, ſuch as convulſions, coma, &c. precede a favourable change. In general, however, if the patient ſurvive the fourteenth day without any bad ſymptoms, recovery may be expected.

Moiſt tongue, ſoft ſkin with gentle ſweats, the pulſe continuing firm or becoming ſtrong, the urine depoſiting a copious ſediment, and more eſpecially ſlowneſs of the pulſe after gentle ſweats or moderate diarrhœa, the appearance of the ſtools becoming natural, and the appetite for food returning, are favourable ſigns. A pretty free ſalivation alſo without aphthæ, attended with kindly moiſture of the ſkin, and impoſthumes about the ear or about the parotid gland, or a large, puſtular and angry eruption about the lips and noſe, are regarded as ſymptoms portending a favourable event.

On the contrary, where the delirium ſupervenes early, and continues above four days; where there are profuſe diſcharges, either in the form of diarrhœa

rhœa or colliquative ſweats, along with weak pulſe; where there is ſubſultus tendinum, tremors of the hands or of the tongue, conſtant inſomnolency, blindneſs, impeded deglutition (which takes place, when it occurs, about the eleventh day) more eſpecially if attended with ſingultus; where the extremities are cold, and livid petechiæ appear, much danger is to be apprehended. But, as already ſtated, it is very difficult, or perhaps rather impoſſible, to form a deciſive opinion reſpecting the event.

In moſt caſes, gangrene, in a greater or leſs degree, occurs in thoſe parts on which the body had principally reſted during the progreſs of the diſeaſe. In general, the ſores in conſequence heal kindly, after the feveriſh ſymptoms have diſappeared; but ſometimes it happens that the ulcerations are ſo very extenſive that the patient ſinks under the diſcharge.

II. Malignant Putrid Fever, or Typhus Gravior *. In this ſpecies, the ſymptoms at the beginning are more violent than in the former. The rigors, if any take place, are more conſiderable; there is intenſe diſtreſſing heat, at firſt remittent, afterwards permanent; the pulſe is hard, ſmall, quick, and unequal; there is great proſtra-

* For an accurate deſcription of the ſymptoms of this ſpecies, ſee Huxham, p. 92; alſo Home, Princip. Medicin. p. 88.

tion of ſtrength, and much anxiety and deſpondency. Great nauſea and vomiting of black bile, violent pain of the head and of the temples, throbbing of the temporal and carotid arteries, tinnitus aurium, and laborious reſpiration, interrupted by ſighing, attend; and at the ſame time the breath is fetid. The eyes are inflamed, and a pain is felt about the orbits; the countenance ſeems bloated, and has a cadaverous appearance. Pains in the ſtomach, limbs, and back, ſupervene; and alſo tremors and delirium. The tongue at firſt is white, afterwards becomes black and dry, ſo as to render the ſpeech inarticulate; the lips and teeth are covered with a black viſcid ſordes; and there is great thirſt, with a bitter taſte in the mouth. Sometimes, however, although the tongue and fauces be remarkably parched, no thirſt is felt: in ſuch caſes, phrenzy or coma always enſue. The urine is at firſt pale; but, during the progreſs of the diſeaſe, becomes very high coloured, and ſometimes black, with a very fetid ſoot-like ſediment. The ſtools are intolerably ſtinking; of a green, livid, or black colour; and frequently attended with gripes, and with the diſcharge of blood. Small livid or red-coloured ſpots, like flea-bites, called petechiæ, or broad ſpots of the ſame colour, called vibices, appear over the body, ſometimes about the fourth or fifth day, and ſometimes not till the eleventh day, or even later.

An

An efflorescence also like the measles, but of a less bright colour, in which the skin, especially on the breast, appears as it were marbled and variegated, is in some cases observed. These eruptions are commonly attended or preceded by profuse fetid sweats. Sometimes, though very rarely, on the eruption of the sweat the petechiæ disappear, and small white miliary pustules break out: in other cases an itching, smarting, red rash, or large fretting watery bladders on the back, breast, shoulders, &c. are observed. White or dark coloured aphthæ appear in the mouth; and are soon succeeded by great difficulty of swallowing, pain in and ulceration of the fauces, the œsophagus, &c. together with incessant singultus. Hæmorrhages, sometimes from the nose, but more commonly from the intestines, as the stools are bloody, and at the same time sanious, black, and horribly fetid, then take place. Towards the end of the disease, where it terminates fatally, the petechiæ become of a green dark colour, or livid black vibices appear; and these, together with coldness of the extremities, are generally the forerunners of death. Blood drawn during the course of this fever has a livid appearance, has its component parts scarcely cohering, and soon runs into putrefaction.

As in the former species of typhus, so also in this, no certain opinion respecting the event of the disease can

can be formed. The moſt favourable ſymptoms are: a yellow or brown colour of the ſtools; the fetid diarrhœa and ſweating not taking place till a late period of the diſeaſe; and the petechiæ changing from a dark to a bright red colour. The bad ſymptoms are: no thirſt; numerous black petechiæ, or the ſudden receſſion of the petechiæ, with a very feeble pulſe; livid aphthæ; inflammation of the fauces; laborious reſpiration after the appearance of a miliary eruption; ſwelling of the abdomen after profuſe ſtools; diarrhœa, with the diſcharge of very fetid, bloody, ichorous matter; coldneſs of the extremities; and convulſions.

The appearances on diſſection in thoſe who die of this fever exhibit inflammation and often gangrene of the brain and other viſcera, more eſpecially the ſtomach and inteſtines *.

III. Yellow Fever †. This ſpecies of fever occurs in America, and the Weſt Indies. It begins

* Vide Home Princip. Medicin. pag. 89; alſo the Tranſlation of Hoffman, reviſed and corrected by Dr. Duncan, vol. i. page 169.

† For an account of this fever, ſee, A Treatiſe concerning the Malignant Fever in Barbadoes, by Henry Warren, M. D. p. 9; Rouppe de Morbis Navigantium, pag. 304; Blane on the Diſeaſes of Seamen; Hillary's Obſervations on the Diſeaſes of Barbadoes; Mackittrick Diſſertatio de Febre Indiæ Occidentalis Maligna flava; and an Inaugural Diſſertation on the ſubject by Sam. Curtin in Webſter's Medicinae Praxeos Syſtema, vol. i.

gins with a ſudden faintneſs, ſometimes giddineſs, ſucceeded by ſlight ſenſe of cold; ſevere pain in the head above the eye-brows; with a ſlight nauſea, and impaired appetite. Intenſe heat ſoon after ſucceeds; the face is flushed; the eyes are impatient of light, are inflamed, and have a painful ſenſe of heat. The pulſe, in the mean time, is full, quick, but ſoft; the carotid arteries throb; while the pain of the head is ſo violent, that the patient feels as if the temples ſhould be rent aſunder; pains are alſo felt in the joints, and in the loins. The nauſea becomes aggravated, and vomiting is excited; and this ſtate of ſtomach continues throughout the whole diſeaſe, every thing that is ſwallowed being commonly rejected. The matter vomited has different appearances: ſometimes it conſiſts merely of what had been ſwallowed; at other times it is pure bile; and at other times, it ſeems to be acrid bile. Straitneſs and oppreſſion about the præcordia accompany the vomiting. The hypochondria, at the ſame time, generally become more or leſs ſwelled; and great ſoreneſs to the touch is felt at the pit of the ſtomach. When the patient attempts the erect poſture, he is giddy, and feels as if he ſhould fall. Obſtinate inſomnolency takes place; or, if he have a ſhort ſleep, the patient awakens in a fright. Great thirſt and a bitter taſte in the mouth are felt. The tongue, at the beginning of the diſeaſe, appears

appears in ſome caſes ſhining; in others white; and on very rare occaſions, it is of a yellow colour, and covered with ſordes. The belly is for the moſt part bound; but ſometimes diarrhœa takes place at the beginning. The urine is high coloured, and is ſecreted in leſs quantity than uſual. In this manner the diſeaſe begins. Within thirty-ſix or forty-eight hours, however, that is generally in the morning of the ſecond day after the attack, a deceitful remiſſion happens, that impoſes upon the patient and attendants. But within a few hours the vomiting becomes more violent than formerly; and the matter vomited is commonly black. Exceſſive thirſt is felt. The tongue is rough and brown in the middle; but below, and at the ſides, it is, together with the gums and lips, of a very florid red colour: towards the end of the diſeaſe, it frequently appears black. Theſe ſymptoms are commonly aggravated towards the evening, and are ſucceeded by a very reſtleſs night. On the third day, though ſometimes ſooner and ſometimes later, a clammy ſweat, that is by no means refreſhing, breaks out; the pulſe becomes ſlow, languid, and ſoft; the ſkin is ſenſibly cold; and an appearance of relief again takes place. But, inſtead of relief, the ſtrength of the patient is more and more impaired; a conſtant anxiety continues; the reſpirations become leſs frequent, and the breathing is

loud. Deliquium is induced by the ſlighteſt cauſes, principally when the patient attempts to raiſe himſelf in bed. The face and neck become yellow inſtead of red; but the redneſs again returns for a ſhort time. The watchfulneſs is more conſtant; the patient is ſometimes ſlightly delirious, and again becomes ſufficiently recollected. The redneſs of the eyes is firſt changed into a brown, and then into a yellow colour; with which, in a ſhort time after, the whole external ſurface of the body is tinged. The vomiting is not ſo troubleſome upon the fourth day. Putrid bile, however, mixed with black blood, is vomited, and is paſſed alſo by ſtool, but is not attended with gripes. Blood in a diſſolved ſtate is effuſed, ſometimes from the noſe, and ſometimes from the gums. The pulſe becomes ſmall, fluttering, and intermitting; and almoſt conſtant ſingultus attends. The hands and feet are cold, and at the ſame time ſwelled, and of a purple colour. The lips are parched, and covered with a livid ſordes; the urine is very yellow, and depoſites a ſediment which is almoſt quite black. Coma now ſupervenes: and in ſome caſes the breathing is like that in apoplexy, now ſtertorous, and now eaſy; in other caſes coma is very ſlight, and is interrupted by delirium. Matters remain ſometimes in this ſituation for twenty-four or thirty-ſix hours, the patient lying like one almoſt dead, and ſcarcely any

pulſation being felt at the wriſt. In the mean time broad livid ſpots appear about the præcordia and loins. Violent convulſions at laſt come on, which terminate in death.

The event of this fever is always very precarious. It often proves fatal within twenty-four hours after its attack. Sometimes the fatal termination is protracted to the eleventh or twelfth day; but it moſt commonly happens between the fourth and ſeventh. Where the patient recovers, there is no regularly marked criſis. The bad ſymptoms are: extreme weakneſs from the beginning; early black vomiting, as, before the fourth day; early yellowneſs of the ſkin; hæmorrhages from the noſe, lungs, or urinary paſſages, after the third day; and livid blotches about the præcordia and loins. The favourable ſymptoms are: firmneſs of the pulſe; no extreme proſtration of ſtrength; no black vomiting, nor yellowneſs of the ſkin, till after the fifth or ſixth day; and, on ſome rare occaſions, a large eruption of boils over the whole body.

In addition to the above hiſtory, the following circumſtances, detailed by Dr Ruſh, as having characteriſed the yellow fever which appeared at Philadelphia in 1793, deſerve attention.

The pulſe was, both at the beginning and during the courſe of the diſeaſe, exceedingly irregular. At the beginning, although often full, tenſe, and quick,

it

it was frequently ſo low as ſcarcely to be felt at the wriſts; or intermitting, or preternaturally ſlow. Dilatation of the pupil generally occurred in caſes where it was ſlow; but the ſlowneſs of the pulſe uſually preceded the dilatation of the pupil. After the fever had continued for ſome weeks, and the weather had become more cool, (that is, after the tenth of September) the pulſe was as full, tenſe, quick, and frequent, at the beginning, as in caſes of pleuriſy; at the ſame time, however, it communicated, when felt, a peculiar ſenſation to the fingers, no two pulſations being exactly ſimilar. It was equally full, hard, and frequent, in the remiſſions of the fever as in the exacerbations. Although before death it commonly became weak, frequent, and imperceptible; yet in ſeveral caſes it was full, active, and even tenſe, during the laſt hours of life.

Many complained of a dull pain in the region of the liver; but few of that foreneſs to the touch at the pit of the ſtomach noticed in all former hiſtories of the yellow fever. A burning pain, however, in the region of the ſtomach, accompanied the vomiting which occurred about the fourth or fifth day. The appearance of what was vomited was different at different ſtages of the diſeaſe. On the firſt and ſecond days, it conſiſted commonly of pure bile. About the fourth or fifth day, it reſembled coffee impregnated with its grounds. To-

wards the close of the disease, it was of a pale black colour, and seemed to be acrid bile with a flaky substance floating in it; and at the very close it was dark-coloured grumous blood. Along with these discharges of the stomach, there was a large worm sometimes, and often tough mucus.

The stools varied in appearance according to the treatment of the disease. They generally indicated a superabundance of bile; but in some cases they were as white as in jaundice. The discharge of urine was sometimes accompanied by a burning pain, resembling that which takes place in gonorrhœa. A total deficiency in the secretion of urine, without any pain, occurred in many cases for a day or two.

Tremors of the limbs, and twitchings of the tendons, previous to the fatal termination of the disease, were uncommon. In some cases, a morbid degree of strength to a wonderful extent took place at that period. In the greatest number of instances, the patients died in a placid manner.

The disease appeared under a variety of forms. It was often so mild that the patients were not confined to their beds. In such cases, the only symptoms were, sallowness of the countenance, nausea, universal languor, and irregularity of the pulse. It appeared invariably to affect chiefly the weak parts of the system which it attacked; as the head, the lungs, the stomach, the

bowels, and the limbs, ſuffered more or leſs according as they were more or leſs debilitated by previous inflammatory or nervous diſeaſes. Soon after the fever became generally prevalent, every other diſeaſe ſeemed to yield to its ſuperior influence; and hence a number of anomalous ſymptoms occurred, in many caſes, which impoſed on ſeveral practitioners the belief that in ſuch caſes the fever did not exiſt.

The appetite for food returned much ſooner during the courſe of convaleſcence after this diſeaſe than it does in ordinary fevers *.

Where death happens, the proceſs of putrefaction advances ſo rapidly, that it is often neceſſary to inter the body within a few hours after the fatal event. The appearances on diſſection † exhibit the ſtomach, inteſtines, and meſentary, covered with gangrenous ſpots. The orifice of the ſtomach ſeems greatly affected, the ſpots upon it being ulcerated. The liver and lungs are ſaid to appear alſo of a putrid colour and texture.

Dr Ruſh remarks, that the appearances on diſſection were different in different caſes; and ſeemed to be owing to determinations of the fluids to

* Vide, An Account of the Bilious Remitting Yellow Fever, as it appeared in the city of Philadelphia in the year 1793; by B. Ruſh, M. D. p. 40 et ſeq.

† Vide Lind's Eſſay on the Diſeaſes of Europeans in Hot Climates, p. 114.

to different parts *. Unequivocal ſymptoms of morbid congeſtions of blood in ſeveral of the viſcera, but more eſpecially in the brain, appeared, he obſerves, in many caſes †.

IV. Mixed Continued Fever, or Synochus. Caſes frequently happen where the ſymptoms of fever do not occur in the order of ſucceſſion mentioned under the three preceding heads. Thoſe fevers, according to Dr Cullen, generally conſiſt of ſuch a complication of the ſymptoms of inflammatory and nervous fever, that it is at the beginning difficult to aſcertain the ſpecies to which they belong; but that at firſt the ſymptoms are thoſe of inflammatory fever; and afterwards, ſometimes gradually and ſometimes ſuddenly, they degenerate into thoſe of typhus.

Fevers of this kind appear frequently in Scotland. Although on their firſt attack they be attended with violent pain in the head, ſtrong hard quick pulſe, fluſhed face, intenſe heat, ſometimes not preceded either by languor or by a cold fit; yet the nauſea, giddineſs, and diminiſhed energy of the brain, which at the ſame time take place, together with certain circumſtances reſpecting their exciting cauſes, to be afterwards mentioned, clearly ſhow that the diſeaſe is to be referred to the

* Page 114. † Page 48.

the ſpecies of typhus, as the event of the caſe ſooner or later proves.

From the above deſcription of the various ſpecies of continued nervous fever it appears, that the eſſential characters of typhus are, impaired energy of the brain, conſiderable proſtration of ſtrength, irregular action of the vaſcular ſyſtem, and a deranged ſtate of the chylopoetic viſcera. This definition, however, is neither ſo accurate nor ſo ſatisfactory as could be wiſhed; yet it is not eaſy, nor perhaps in the preſent imperfect ſtate of phyſiology poſſible, to form a better one from the hiſtory of the ſymptoms alone.

Typhus therefore differs from ſynocha in one of the great eſſential characters; namely, impaired energy of the brain. It differs too in ſeveral other particulars reſpecting the ſymptoms; as, in being preceded by languor and liſtleſsneſs, in being attended with a weak pulſe, &c. and in being protracted to a longer period.

The ſeat of the diſeaſe in typhus has not yet been clearly aſcertained. Every part of the ſyſtem is affected; the powers both of the body and mind are deranged; and it is difficult to determine whether one part be affected before the others, and whether the derangement of one part depend upon or be unconnected with that of others.

CASES

CASES of CONTINUED NERVOUS FEVER.

I. SLOW NERVOUS FEVER.

CASE I. (XLIX. 2.)

A MAN, of about thirty years of age, was affected with a ſlow fever; which was accompanied with no ſymptom deſerving notice, except that his appetite for food had entirely failed. His pulſe and ſtrength became every day weaker; and at length he died ſuddenly.

Appearances on Diſſection.

ABDOMEN. The bile in the gall bladder was tinged of a brown colour. A calculus of the ſize of a dens molaris, of a pale colour, and very friable on its ſurface, was found in it. This gall ſtone contained ſeveral other ſmall ones of a black colour.

THORAX. The lungs were marked with black ſpots. The pericardium contained little or no ſerum. The blood, which in other parts of this body had an unnatural dirty appearance, was in the ventricles of the heart in a coagulated ſtate.

CASE II. (VII. 6.)

A PORTER, labouring under an acute fever, was affected with a very violent pain in his head, which

was

was ſucceeded by delirium. Soon after which he died.

Appearances on Diſſection.

Head. A ſmall quantity of ſerous fluid was found between the dura and pia mater; part of it, coagulated like tranſparent jelly, was ſeen among the ſanguiferous veſſels. In the ſinus of the falx a long ſlender concretion was obſerved. The whole brain had the natural appearance.

Case III. (xlix. 12.)

A man, aged forty years, was received into the hoſpital of Bologna, in conſequence of a wound in the tibia occaſioned by a blow with a bludgeon. When his wound had aſſumed a favourable appearance, and he himſelf was in good health, he was ſuddenly affected with an acute fever; which gradually increaſing in violence, at laſt terminated in death.

Appearances on Diſſection.

No uncommon appearance whatever was diſcovered, except that the blood retained nearly the natural vital fluidity.

Case IV. (i. 14.)

A woman, who was previouſly affected with lues venerea, having been ſeized with fever, at-

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tended with excruciating pains in the head, and delirium, died in the hoſpital of Padua.

Appearances on Diſſection.

Head. The ſkull internally appeared in ſome places of a blackiſh red colour. That portion of the dura mater next the ſuperior middle part of the right lateral ſinus was much thickened; and it coaleſced perfectly with the pia mater, and alſo with the ſubſtance of the brain. The meninges and brain in that part were almoſt ſemiputrid, and tainted with a dirty colour of a yellowiſh cineritious hue: this colour was moſt conſpicuous in the cortical ſubſtance of the brain. When the cerebellum was drawn out from the hollow formed by the dura mater, its external ſurface was ſo cloſely connected to the dura and pia mater that part of it adhered to them; but the adheſion did not exceed in extent two fingers breadth, and therefore it was not ſo conſiderable as in the cerebrum. The ſinuſes of the dura mater, and the veſſels of the pia mater, which were larger than uſual, were diſtended with black blood. The ſanguiferous veſſels, in many places throughout the medullary ſubſtance of the brain, appeared to be very numerous, and were more diſtinct than they commonly are. The lateral ventricles were filled with a fluid of a brown colour, and their ſurfaces were tinged with the ſame colour. The pineal gland was firmer, larger, and whiter than uſual, and ſeemed

ed to contain a kind of cells. This woman had a peculiarity in the form of her ſkull which deſerves notice; the right ſide projected more outwards at the poſterior part than the left, and conſequently the cavity of that ſide, and the hemiſphere of the brain contained in it, were larger than thoſe of the left ſide.

Case V. (xiv. 5.)

A young man affected with fever was received into the hoſpital of Bologna. He had, it appeared, an old fiſtula above the right maſtoid proceſs. Injections thrown into it returned partly by the neighbouring ear, with which nevertheleſs he heard. The fever having increaſed in violence, within a few days after his admiſſion he became delirious and comatoſe; and in that ſtate died.

Appearances on Diſſection.

Head. All the veſſels of the brain were turgid. There was a conſiderable quantity of green ſerous fluid in the lateral ventricles; and from that contained in the right ventricle ſome pus of a greeniſh colour ſubſided. A much greater quantity of the ſame kind of pus was obſerved between the dura mater and the internal and inferior ſurface of the petrous proceſs of the right temporal bone; and thus paſſing between both it extended into the vertebral tube. The cavity of the tym-

panum was alſo filled with the ſame kind of matter. That ſurface of the petrous proceſs, on which are placed the Fallopian duct and the ſemicircular canals, was ſo much eroded, that a pretty wide cleft appeared on the poſterior ſide of the foramen, through which both portions of the auditory nerves paſs. That cleft was covered with the dura mater, which there ſeemed to be alſo eroded, but not to ſuch an extent as the cleft itſelf. Although the brain had a proper degree of firmneſs, and was examined the day after death, the ſmell was ſo offenſively putrid that it was not poſſible to trace the paſſage of the matter from the cleft to the right ventricle, nor yet to aſcertain whether any other parts within the ear beſides the tympanum were injured.

Case VI. (xxi. 9.)

A husbandman, aged thirty five years, having fallen from a great height, and bruiſed his right ſide, was received into the hoſpital of Padua. This man, after he had recovered ſo completely that he was about to be diſmiſſed from the hoſpital, having by ſtealth crammed himſelf with bread and ſome other indigeſtible aliment, was ſuddenly affected with violent fever, to which difficulty of breathing ſoon after ſucceeded. There was, however, no pain in the cheſt. Although thoſe remedies

dies which the diſorder ſeemed to require were employed, eſpecially blood-letting once or twice, all was to no purpoſe; for he died in eight days after the attack. During the latter days of his life, he lay on his back, was affected with a ſtertor in his breathing, and had a very frequent, for ſome time full, and latterly, cord-like pulſe.

Appearances on Diſſection.

Abdomen. The large inteſtines were particularly conſpicuous, being much diſtended with air. The lower parts of the ileum were to a conſiderable extent of a blackiſh red colour; the blood veſſels being as diſtinct as if they had been filled with coloured wax. There was alſo a ſtrong ſmell from the parts, ſuch as is commonly felt in inflamed inteſtines. The liver was externally of a whitiſh colour, with livid edges; internally, it was variegated like marble. The gall-bladder contained a ſmall quantity of bile only; and the bile was not perfectly natural. The ſpleen was large, whitiſh, and very flabby.

Thorax. The lungs adhered every where to the pleura, not only by means of membranes, but apparently alſo immediately by themſelves. When however this was examined more accurately, it was found that a thin yellow concretion, reſembling a membrane was interpoſed between the membrane of the lungs (which was ſound) and the pleura. When the lungs were drawn forward, both

both that concretion and the pleura itſelf followed. The inferior portion of the left lobe was very large, heavy, much indurated, and reſembled the ſubſtance of the liver. The other parts of the lungs were not unſound. The pericardium contained a quantity of yellowiſh turbid fluid. Polypous concretions were found in the large veſſels and auricles of the heart. The largeſt of theſe concretions was obſerved in the right auricle; its branches extended from thence into the jugular veins.

Case VII. (lv. ii.)

A PORTER, of a tall ſtature, robuſt, although pale in the face, and of a lean habit of body, aged about forty years, addicted to drinking, had been affected with ſcabies, for which he had taken ſulphur mixed with wine. After having continued for ſix months in apparent good health, he was ſeized with fever, and brought into the hoſpital of Bologna.

On the firſt day, the ſtate of the pulſe and the other ſymptoms were not very bad; but his ſituation was rendered doubtful by a certain anxiety and reſtleſsneſs. On that day a medicine was given with a view to cleanſe out gently the ſtomach and bowels. On the day following, he was affected with vomiting and difficulty of reſpiration, and was

was convulſed in his whole body; he was beſides violently delirious, and in his delirium cried out that his belly was on fire. Under theſe circumſtances he died, on the third day after his admiſſion into the hoſpital.

Appearances on Diſſection.

ABDOMEN. The fat (which was not in large quantity) contained in the omentum, in the pinguedinous appendiculæ of the colon, and eſpecially in thoſe that were near the ſpleen, and alſo in the adipoſe membrane of the left kidney, was of a brown and livid colour. The colon was diſtended to three times its uſual ſize by the contained air. The ſtomach was contracted, was of a brown colour externally; and internally, at that part which is next the ſpleen, was inflamed, without any eroſion, to the extent of an hand-breadth. The lower part of the liver was of a livid blackiſh colour, but the appearance was quite ſuperficial.

THORAX. The lungs, the heart, and the diaphragm, were found in a natural ſtate. The ventricles contained ſome polypous concretions.

CASE VIII. (XLIX. 14.)

A NOBLEMAN, aged about forty years, who when in health was ſubject to ſuch conſtipation of the bowels as required the conſtant uſe of purgative medicines, removed his habitation from his native country

country, the air of which was pure, to a ſituation where the atmoſphere was denſe. Soon after this he was affected with fever, marked by no other ſymptom than a continual anxiety of mind and conſtant ſtate of watching. On the fourteenth day pain in the head ſupervened; and his pulſe became ſo irregular that it could only be felt now and then. In this ſituation he died.

Appearances on Diſſection.

Abdomen. The fundus of the ſtomach was tinged with a black colour. The inteſtines, and eſpecially the large ones, were contracted. The other abdominal viſcera were found. All the blood was ſtrongly coagulated.

Case IX. (iv. 6.)

A man of a ſlender make, about forty years of age, became affected with acute fever. During the night of about the ninth day, he loſt the faculty of ſpeech. When ſpoken to, he ſhowed no ſign of underſtanding what was ſaid. A ſlight power only of moving and feeling remained in all his limbs. His face was not red. About the thirtieth day he died.

Appearances on Diſſection.

Head. Some ſerous fluid was found effuſed between the meninges of the brain; the ventricles

were full of a ſimilar fluid. Every thing elſe was natural.

Case X. (v. 2.)

A man, aged thirty-three years, of a ſanguineous temperament, of a lean habit of body, affected with hernia, and much addicted to the uſe of wine and tobacco, began to complain of pain in the left ſide of his head, particularly about the occiput, which was followed by a pain and weakneſs of the muſcles of the neck on the ſame ſide. Theſe ſymptoms were accompanied with fever, which was at firſt violent, but afterwards ſeemed to remit. His pulſe became not only ſlow, but alſo weak, affording little reſiſtance to the fingers; and at the ſame time, his ſtrength began to fail, ſo that every motion of his body now became difficult. After interrupted delirium, he loſt the power of ſpeech, and of motion; and at laſt, ſinking gradually, he died on the fourteenth day of the diſeaſe.

Appearances on Diſſection.

Abdomen. The inteſtines within the ſcrotum forming the hernia, were ſo ſtrongly connected by ſurrounding membranes to the teſticle, that they could not be replaced.

Head. When the brain was taken out of the ſkull, a little purulent matter was obſerved at its

baſis; and when that was wiped away, on handling the brain more matter appeared. This proceeded from the ventricles through the infundibulum; for both left and right ventricle, but more eſpecially the latter, contained a conſiderable quantity of that matter. There was a foramen in the corpus ſtriatum of that ventricle, which communicated with a ſinuous ulcer occupying the third part of the ſubſtance conſtituting the baſis of the brain on the right ſide. No morbid appearance occurred in the left ſide of the brain.

Case XI. (vii. 2.)

A young man, about twenty years of age, who had a ſlow fever, attended with thirſt, was admitted into the hoſpital of Bologna. As the appearance of his urine, and the ſtate of his pulſe, were in ſome meaſure ſimilar to thoſe of perſons in health, the diſeaſe ſeemed ſlight. About the eighth day, however, violent delirium ſupervened, which continued for ſeven days. The delirium having abated, he remained in a ſtate of imbecility, except that at ſome times his recollection returned. At laſt he died.

Appearances on Diſſection.

Externally. The body approached ſomewhat to a livid appearance, eſpecially under the nails of

of the fingers; and the muſcular fleſh was rather of a browniſh than of the natural red colour.

Thorax. All the viſcera were ſound; there, however, was no appearance of fluid in the pericardium.

Head. A gelatinous concretion was obſerved ſurrounding the ſanguiferous veſſels which creep through the pia mater. That membrane, at the baſis of the ſkull, being torn, a quantity of fluid, which in colour and conſiſtence reſembled cow-milk whey, flowed out. The whole brain was ſound. The blood in this body was of a black colour, and was thick, but ſtill fluid.

Case XII. (vii. 4.)

A man, aged thirty-five years, became affected with pain in the thorax, accompanied with fever. The pain having ceaſed, delirium ſupervened; while the fever conſtantly increaſed in violence, and continued till death. This event took place on the eleventh day.

Appearances on Diſſection.

Thorax. The poſterior parts of the lungs were ſomewhat hard, and were of a red colour. A polypous concretion appeared in each ventricle of the heart; the larger of which was in the left ventricle. This is an unuſual circumſtance, the larger being commonly found in the right.

Head. When the brain was taken out of the cranium, a little ſerous fluid was diſcharged from the meninges. A polypous concretion appeared in each of the large ſinuſes of the dura mater. The whole brain was ſoft. The plexus choroides of the left ventricle was very turgid, and, as it were, varicoſe.

Case XIII. (xvi. 6.)

A man, about forty years of age, after having laboured under a ſlow fever for many weeks, had a ſlight ſwelling of his feet, a tickling cough, and parched fauces. His reſpiration was ſhort and difficult, and required that his neck ſhould be erect. His pulſe could be ſcarcely felt. He died ſuddenly.

Appearances on Diſſection.

Abdomen. Although a watery fluid was diſcharged from the left ſide of the umbilical region, when the teguments of the abdomen were in the courſe of diſſection ſeparated from the muſcles; yet every thing in that cavity was in a natural ſtate, except the ſpleen, which was three times larger than uſual.

Thorax. A limpid ſerous fluid was found ſtagnating in each ſide of the cheſt. This being put into a glaſs veſſel, depoſited at the bottom of the veſſel ſome matter in ſeparate portions, ſo that it had

had no continued membranous ſubſtance floating in it, as ſerum in the thorax generally has. The lungs were ſound, and entirely free, except that the lower part of the left lobe was connected to the pleura by a ſhort and ſlender membranous band. The pericardium was dilated, and contained more than half a pound of limpid ſerous fluid. The heart was large, and in its right ventricle eſpecially, a flaccid polypous concretion was ſeen, a circumſtance which is rare in caſes where water is found ſtagnating in the cavities. The thoracic duct, and alſo the lymphatics in the abdomen, were ſo empty, that not the leaſt veſtige of them could be traced.

Case XIV. (xxi. 15.)

An old man, aged ninety, who had been for ſome time in the hoſpital at Padua on account of a contuſion on his thigh, became, without any apparent cauſe, affected with ſlight fever. No remarkable ſymptoms occurred. His pulſe was quick and weak, but never intermitting. Within a few days he gradually ſunk.

Appearances on Diſſection.

Abdomen. The aorta and iliacs had here and there bony ſcales. The orifice of the pylorus was furniſhed with what is called its valve at one part only. In all the remaining part, which was by much

much the largeſt portion, there was no veſtige of that kind, and no appearance of its ever having exiſted. The orifice too was much larger than uſual. In the ſubſtance of the left kidney there were cavities in two places; in one the cavity was ſmall, in the other large. Theſe cavities contained a watery fluid included within the proper coat of the kidney, which was extended over the upper part. The urinary bladder, found in other reſpects, grew out at the left ſide above the inſertion of the ureters into a cell compoſed of its own coats, of a hemiſpherical figure and of a moderate ſize. It had, by a ſmall opening, a communication with this cell. In the ſcrotum a hernia was obſerved, which ſeemed to have formerly contained a portion of the inteſtinal canal, or at leaſt a larger portion of the omentum than it then held. It was a pretty large ſac, deſcending almoſt as far as the teſticle from the ring of the oblique muſcle on the right ſide between the membrane attached to the cremaſter muſcle and the tunica vaginalis, which was apparently ſound. This ſac lay on the inſide of the ſpermatic veſſels. It was formed by the peritoneum having fallen down through an orifice capable of admitting the finger, and then having become dilated and thickened. A ſmall and ſlender fold of the omentum had paſſed through that orifice into the ſac, and adhered firmly to its parietes.

Thorax. A ſmall quantity of red coloured watery fluid was found in each ſide of the thorax; the left lobe of the lungs was connected at ſome places to the pleura, which was perfectly ſound; but the right lobe had almoſt no adheſions. This latter lobe, however, at the lower part, was ſwelled and indurated from inflammation. Almoſt the whole anterior ſurface of the heart was covered with fat, although the man was in other reſpects lean. The valves, at the orifices of the right ventricle, were not only neither rigid nor thickened; but even appeared, as did alſo thoſe that belong to the pulmonary artery, to be compoſed of rather a thinner membrane than uſual. In the left ventricle, however, the mitral valves were thicker than ordinary; and beſides, the ſemilunar were entirely bony and inflexible. Internally they protuberated ſo, that they were at a diſtance from the parietes of the artery. They alſo grew out into a ſmall thick body in the middle of their border. The aorta from the heart, as far as that part where it adheres to the vertebræ, as well as the carotids and ſubclavians, exhibited no bony ſcales; although ſuch ſcales were evident to the touch throughout the remaining courſe of the aorta within the thorax.

Case XV. (vi. 4.)

A woman of about twenty five years of age became affected with malignant fever, attended from the beginning with deafneſs. On the ſeventeenth day coma ſupervened, ſo that, when ſpoken to, ſhe neither anſwered, nor opened her eyes. In this ſituation ſhe died.

Appearances on Diſſection.

Head. The brain appeared to be quite ſound in every reſpect, except that, when it was taken out of the ſkull to be examined, a ſmall quantity of ſerous fluid was diſcharged through the infundibulum. In the cavity of the tympanum of the ear, and in the neighbouring ſinuſes, ſome ſanious matter was found.

II. Typhus Gravior.

Case I. (x. 5.)

An unmarried woman, aged twenty ſix years, affected with acute fever, was about the ſeventh day ſeized with convulſions, ſo that when ſpoken to ſhe laughed in that convulſive manner ſtiled riſus ſardonicus. The convulſions were attended with delirium, and were ſo violent, that it was neceſſary to tie her in bed that ſhe might not fall out. All

theſe ſymptoms ceaſed an hour before her death, which happened on the ninth day. Her reſpiration had become more and more difficult.

Appearances on Diſſection.

EXTERNALLY. A little ſerum had flowed out from the right ear.

THORAX. In the right ſide of the cheſt, the lungs adhered to the ſternum, and laterally to the ribs; and externally, on that part of them next the clavicle, a certain ſubſtance of an intermediate nature between fat and a gelatinous concretion, ſuch as ſometimes floats on the fluid of dropſical patients, was found. This circumſtance rendered it probable that this woman had laboured under ſome diſorder of the thorax previous to that diſeaſe which had proved fatal. Eight or nine ounces of ſerous fluid were found effuſed within the cavity of the thorax on the ſame ſide. Polypous concretions like mucus were obſerved in each ventricle of the heart; that in the right ventricle was the largeſt.

HEAD. The whole brain appeared ſound; and nothing remarkable occurred within the cranium, except that when the dura mater was in ſome places torn, in ſeparating it from the ſkull, ſome drops of ſerum flowed out; and blood much diluted with ſerum was diſcharged from ſome very minute veſſels which were accidentally lacerated.

Case XXI. (xxxi. 2.)

A young man who, during the whole courſe of his life, even in the beſt health, had his bowels in a looſe ſtate, having reached his twentieth year, became affected with gripes in his belly, attended with frequent bloody ſtools, or in other words had dyſentery. After twelve or fifteen days, his diſeaſe was converted into a ſimple diarrhœa, with ſtools of a yellow colour, and unaccompanied with gripes. When, by means of proper medicines the diarrhœa had become ſomewhat alleviated, he was ſeized with a tertian fever, from which within a month he was relieved. The diarrhœa having ſtill continued, he was ſuddenly attacked with acute fever, that had frequent exacerbations. His pulſe was ſoft, ſmall, weak, and quick. To theſe ſymptoms confuſion of mind, and a peculiar ſwelling of the anterior part of the left ſide of the thorax, ſupervened. Thus affected, he died, about the fourteenth day from the beginning of the acute diſeaſe.

Appearances on Diſſection.

Abdomen. Although the belly did not ſeem in the ſmalleſt degree ſwelled, it contained a great quantity of ſanious ichor that had proceeded from the inteſtinal canal, a certain portion of which was perforated in ſeveral places. That portion comprehended

comprehended the extremity of the ileum, and alſo the contiguous part of the colon, to the length of two hands breadth. The canal was there eroded, ulcerated, and on its internal ſurface, gangrenous, ſo that the perforations were not to be wondered at. Near this diſeaſed part of the inteſtines ſome of the glands of the meſentery had grown out into a tumour, containing ichor not unlike that found in the cavity of the belly. The ſubſtance of that tumour was ſoft and flabby, and appeared approaching towards a ſtate of putrefaction. The ſpleen was three times larger than natural.

Thorax. When the ſkin and muſcles of the thorax, covering the ſwelling formerly mentioned, were cut into, a large quantity of ſerous fluid was diſcharged, eſpecially at the ſide of the upper part of the ſternum; for there ſerum ran out in ſtreams from the borders of the pectoral and ſubclavian muſcles. The lungs were ſound. The pericardium contained ſerum, like water in which freſh meat had been waſhed. The heart was ſo ſoft and flabby, that, when felt with the fingers, it ſeemed to be membranous rather than muſcular. In the ventricles fluid blood, which was ſo frothy that it might have been compared to ſoap ſuds, was found. In all the veins there was ſuch a quantity of air, that, although they had very little blood in them, they were exceſſively diſtended. This was more eſpecially the caſe with one large

branch of the veins which belong to the ſpleen; for, although it appeared as if it could not be dilated to a greater extent, ſcarcely any veſtige of blood could be traced in it.

HEAD. A ſmall quantity of ſerous fluid appeared within the cranium; but the brain itſelf exhibited no marks of diſeaſe.

CASE III. (XLIX. 24.)

A WOMAN, aged fifty years, affected with malignant fever, was admitted into the hoſpital of Padua. Her pulſe during the firſt ſix days was ſmall and indiſtinct, but afterwards became ſomewhat more perceptible. A ſenſation of conſiderable ſtraitneſs of the breaſt during reſpiration, together with palpitation of the heart, having ſupervened, ſhe died within the ſpace of two days.

Appearances on Diſſection.

THORAX. The blood in the left ventricle of the heart was half coagulated. In the right ventricle, which it diſtended, it formed a polypous concretion, apparently of a fleſhy conſiſtence; but nevertheleſs ſo tenacious, that it reſiſted the knife as much as the moſt viſcid cruſt found on the blood of pleuritic patients uſually does.

III. MIXED

III. Mixed Fever.

Case I. (xlix. 6.)

A woman, aged thirty years, of a bilious temperament, who had for a conſiderable time laboured under a double tertian fever, received a blow upon the abdomen with a ſtick. Having been admitted into the hoſpital of Padua, ſhe complained only of pain in the abdomen; but on the third day after the blow ſhe began to be delirious. Her pulſe was ſmall, and quick; and ſhe vomited more than once a fluid reſembling water in which freſh meat had been waſhed. At length, the diſeaſe having increaſed every day, ſhe died.

Appearances on Diſſection.

Abdomen. The muſcles were found to be contuſed; in ſuch a manner, nevertheleſs, that no marks of contuſion appeared, neither on the outſide nor on the inſide of the belly. The liver was of a whitiſh colour, and ſomewhat harder than uſual. The gall-bladder was of a very large ſize; and contained about three ounces of bile of a black colour. Some of the ſame kind of bile was found in the ſtomach. Every thing elſe within the abdomen was ſtrictly natural.

Thorax. The lungs, on the ſurface which was turned

turned towards the vertebræ, were conſiderably inflamed; but in other reſpects ſound. The right ventricle of the heart contained a ſmall polypous concretion.

Case II. (xvi. 17.)

A girl of about fifteen years of age was affected with acute fever, attended principally with a violent pain in the head, for the other ſymptoms were mild. The fever ſeemed to remit about the tenth day. Within a few days, however, great thirſt, laborious reſpiration, and pain in the left ſide of the thorax, ſupervened to the fever. Theſe two latter ſymptoms having continued to increaſe in violence, her ſpeech and underſtanding being unimpaired, ſhe died within a few days, contrary to the expectation of thoſe who attended her.

Appearances on Diſſection.

Thorax. The lungs were ſound; but the left cavity of the cheſt was filled with fluid not very unlike the urine of horſes: in this ſome concretions, reſembling the white of an egg, floated. There was alſo a very ſmall quantity of ſerous fluid in the right ſide of the cheſt. The pericardium was completely filled with a fluid of a thicker conſiſtence than that in the thorax; and as the external ſurface of the heart was ſlightly eroded,

it

it was probable that it had been ſo eroded by the ſame fluid. Polypous concretions, ſomewhat like condenſed mucus, appeared in the ventricles of the heart. That in the left ventricle was the larger.

Case III. (xxiv. 6.)

An old man who had been for three months in the hoſpital of Bologna on account of a fractured leg, was detained there from a ſlight, though obſtinate fever. At laſt it was unexpectedly diſcovered that he had no pulſe, although it had not hitherto intermitted, and although the man aſſerted that he did not feel himſelf worſe than uſual at that time. With a view to confirm what he ſaid, he immediately raiſed himſelf up, and ſat erect in bed. In a ſhort time, however, he died.

Appearances on Diſſection.

Abdomen. One of the kidneys contained under its proper coat a cell, of the ſize of a ſmall bean, filled with ſerum. Granules, as if of tobacco, appeared at the ſides of the ſeminal caruncle. Within the pendulous part of the urethra only one of the lacunæ, and that a ſmall one, was obſerved.

Thorax. There was no dilatation in any part of the thoracic viſcera or large veſſels; although the aorta exhibited, near its valves and in other places,

places, marks indicating future offification; and although it had a ſmall bony lamella within its internal coat at that part where, after having ſent off the left ſubclavian, it began to deſcend. Polypous concretions were here and there ſeen in the ventricles of the heart, eſpecially the right one, and in the large blood veſſels. One of theſe was of a white colour; and of ſo firm a texture, that it gave great reſiſtance when an attempt was made to pull it in pieces.

Head. Although no watery fluid flowed out from the vertebral tube when the upper cervical vertebræ were ſeparated from the lower, a conſiderable quantity was diſcharged during the opening of the head, and the lateral ventricles contained not a little. The ſubſtance of the brain was not flabby, but was even perhaps the hardeſt that was ever felt. The blood veſſels, ſo far from being pale, were moſt of them (eſpecially the ſinuſes) filled with black blood. Although the weather was cold, and it was ſcarcely three days ſince the death of the ſubject, and although there were no marks of putrefaction in any part of the body, air bubbles were ſeen in thoſe two arteries which paſs between the hemiſpheres of the brain, near the ſuperior ſurface of the corpus calloſum. A conſiderable portion of the parietes of the right carotid artery, near the cavernous ſinus, had become thickened, and of an intermediate nature

between ligament and cartilage; yet on its internal ſurface it was even membranous. A ſimilar morbid appearance ſeemed begun in other large veſſels of the brain. On the outſide of the cranium that diſeaſed ſtate of the veſſels was much more conſiderable; for on one ſide of the neck a pretty large bony ſcale was found between the coats of the carotid, juſt at its diviſion, and the whole trunk of that artery was very much dilated. The other carotid was of the natural dimenſions.

CASE IV. (XXXVI. 23.)

A WOOL-COMBER, of about forty years of age, came into the hoſpital at Padua, on account (as he himſelf ſaid) of obſtructions in the hypochondria. The bad colour of his face; the bad health he had ſuffered for a whole year; the irregular fever with which he was often troubled, and which was not abſent at that time; and more eſpecially the examination of both hypochondria, particularly the right one, confirmed what he had ſaid. When he ſeemed to have received ſome benefit from the uſe of the medicines preſcribed, he became unexpectedly affected with acute fever, accompanied with ſymptoms of internal inflammation of the thorax; and within ten or twelve days died.

Appearances on Diſſection.

Abdomen. Although the weather was cold, and it was not yet two days ſince the death of the ſubject, the abdominal muſcles were flabby, and at the lower part were of a greeniſh colour. The liver was uncommonly large; and, although externally its colour did not appear bad, internally it was of a pale brown colour: beſides, when accurately examined, the whole of it both internally and externally was marked with certain brown ſpots, and was harder than uſual; a circumſtance which was aſcertained both by the fingers and by the knife, as it was cut into in various directions and in different places. It was obſerved that no yellow point appeared from the ſections of any of the veins in cutting into the liver, which is the uſual mark of the hepatic ducts being alſo cut into. The gall-bladder was ſmall in proportion to the ſize of the liver, and contained a little bile of a colour approaching to that of aſhes, ſo that it was uncertain whether the hepatic ducts had become collapſed from the ſmall quantity of bile in the gall-bladder, or if that pale colour of the bile itſelf had prevented the appearance of the above-mentioned mark of thoſe veſſels having been cut through. The ſpleen, in all its dimenſions, was double the natural ſize; but in other reſpects was ſound. The ſplenic artery, from its origin to its termination, was no where tortuous, or ſo to ſpeak, varicoſe as uſual,

uſual, except in one place, about the middle of its courſe, where it was ſomewhat inflected. A hard body, of the bulk and almoſt of the figure of a middle ſized cherry, but with an unequal granulated ſurface, of an intermediate nature between bone and ſtone, had grown on the meſentery. Cloſe by one ſide of this body, an arterial and venous branch paſſed, but did not enter its ſubſtance, and from thence proceeded to the inteſtines, which lay at the diſtance of about two fingers breadth from that body. The ileum, at the ſide next the meſentery, was in one part ſo inflected as to form an angle, which continued even after the meſentery was cut off; and, at the ſame place on the oppoſite ſide, grew out into a ſhort appendix of an hemiſpherical form. The left external iliac vein, near the opening of the internal one, was hard but not oſſeous; for the coats had at that part for a ſhort tract become thickened only. Theſe coats being opened, ſmall chords, and ſome ſmaller ſubſtances like valves, appeared in the cavity of the vein on one ſide where it was not perforated by any orifices. The kidneys were about nine inches in length; but were proportionally narrow, except at the ſuperior extremity, where they were a little broader. The length of the ſinuſes that receive and tranſmit the veſſels was alſo uncommon, which was the more readily obſerved, as all that part of the ſubſtance of the kidneys that ſhould have

made the anterior paries of the ſinuſes was wanting. The larger of thoſe branches which convey the urine into the pelvis of the kidney were therefore wholly expoſed, as were alſo the ſanguiferous veſſels in all that part generally concealed within the ſinus. Two arteries, the one ſuperior and the other inferior, and as many veins, belonged to each kidney. The veins went out of the ſinuſes in ſuch a manner that the inferior one aſcended in an oblique direction into the ſuperior, which was placed tranſverſely. The arteries, however, formed no junction with each other; both the inferior and ſuperior extended tranſverſely, without any obliquity; and, conſequently, the inferior did not enter the ſinus, but paſſed below it almoſt at the lower ſide of the kidney. Both the inferior arteries had their origin much lower than the renal arteries uſually have, as they proceeded from the aorta, at the diſtance of ſcarcely an inch above its diviſion into the iliacs; beſides, they did not come out from the ſides of that veſſel, but from the very middle of its anterior ſurface, and were ſo near to each other that their orifices were ſeparated by a very thin ſeptum only. From that part of the aorta, they proceeded on each ſide, both of them being ſimilar, and without having any ramifications before their inſertion; and were diſtributed over the kidneys in the manner already deſcribed. The ſuperior arteries, on the other hand, which were

were ſomewhat thicker than the inferior ones, differed neither in their origin nor ramifications from the real natural renal arteries.

Thorax. The right lobe of the lungs adhered to the pleura, and was indurated. Some ſpoonsful of bloody watery fluid were found in the pericardium. Two veins, which ran longitudinally upon the poſterior ſurface of the heart were turgid with blood, and as it were varicoſe.

Case V. (xvi. 38.)

A country woman, not above twenty-five years of age, of a pale countenance, who had been married for about four months, and who was three months pregnant, having become affected with a ſlight irregular fever, was admitted into the hoſpital of Padua, where ſhe lay for a month or more. Her pulſe was neither ſmall nor intermitting, although ſhe almoſt lived entirely upon fruit; which was not to be wondered at, conſidering ſhe was pregnant. She had no thirſt. She had no ſwelling in the feet; nor was ſhe affected with faintings. She never complained of any ſtraitneſs or uneaſineſs about the præcordia, nor of any ſenſation of weight, nor of any other uneaſy ſymptoms in the thorax, except a ſlight dry cough, to which ſhe had been occaſionally for a long time habitually ſubject. Although her reſpiration became difficult

if

if ſhe ſwallowed any thing warm, and for that reaſon ſhe begged to have every thing cold, yet ſhe had in other reſpects no trouble in breathing; for during the night ſhe never had any ſenſe of ſuffocation, nor was ever obliged to ſit up in bed on account of her breathing. She lay on her right ſide. In this poſition, although no ſymptom had ſupervened to the ſlight fever, except a pain in the loins, of which ſhe had complained in the very laſt days of her life only, ſhe died.

Appearances on Diſſection.

Abdomen. The belly was opened within half an hour after the death of the mother, with a view, according to the cuſtom of the country, to baptiſe the child if it were alive. This object was accompliſhed; for, on cautiouſly cutting through the uterus and membranes, the infant ruſhed out, as it were, and moved its hands. It did not ceaſe to live till an hour after the death of the mother. The ſpleen was a little larger than natural. The liver was much more ſo; as it extended both lower down than ordinary, and alſo acroſs quite to the ſpleen. Externally it was of a pale colour; and internally it appeared variegated with its own proper colour and that of tobacco. The ſtomach, almoſt in the middle of its length, was contracted, and at each extremity was ſwelled, but in a leſs degree at the righ ſide. which part deſcended in an oblique direction. The other extremity was placed

placed tranſverſely, with its fundus turned ſomewhat anteriorly; and was half full of air and fluid. A great number of lumbrici appeared in the ſmall inteſtines; and wherever they were, but eſpecially in one place, the inteſtines were of a red colour, and protuberated as if forced outwards by violent means.

Thorax. Before the thorax was opened the neck was obſerved to be ſwelled, from the turgeſcence of the thyroid gland; and it was found that milk could be eaſily preſſed out from the breaſts. In the right cavity of the thorax there was a great quantity of yellowiſh watery fluid; in which ſome thick mucus, and as it were membranous ſubſtances, appeared. Some of the ſame kind of fluid was found alſo in the left ſide; and there was ſo much of it in the pericardium, that it was almoſt completely filled with it. In it too the ſame membranous ſubſtances were ſeen. Polypous concretions, formed of a kind of mucus, were found in each ventricle of the heart: thoſe in the left ventricle were a little thicker than thoſe in the right. A very ſmall quantity of fluid appeared at the extreme parts of the feet; although no marks of it had been perceived, neither during life nor before diſſection. The muſcles all over the body were in the moſt natural ſtate.

Case.

Case V. (xxi. 6.)

A mason, aged about thirty years, became affected with fever, in conſequence of fatigue in working. To this periodical daily rigors ſupervened; and ſoon after he began to be delirious during the time of the rigors. At length the delirium, which uſed to go off immediately after the rigors, continued conſtantly; and from that time he grew worſe and worſe. The delirium was of the melancholy and plaintive kind. His pulſe was not irregular. Blood was ſometimes diſcharged from the noſtrils. Although veneſection was had recourſe to even three times, and other modes of cure which ſeemed neceſſary were employed; yet, as he continued always to grow worſe, he gradually at laſt died.

Appearances on Diſſection.

Abdomen. The ſpleen was large.

Thorax. The lungs, except at their anterior part, which was of a whitiſh colour and in a ſound ſtate, were almoſt every where harder than natural. The right lobe, eſpecially at the upper part, was exceedingly indurated, very heavy, diſtended, of a red colour, and compoſed of a ſtrong thick ſubſtance. Although the body was not opened till nine hours after death, all the viſcera were ſtill warm and ſmoking; and the blood which flowed

from their veins when divided, was fluid and warm. Polypous concretions nevertheleſs were drawn out, not only from the crural veins, but alſo from the heart, from whence they extended to the pulmonary veſſels of one ſide at leaſt.

CAUSES of Continued Nervous Fever.

Predisponent Cause. Many facts concur to prove, that a certain ſtate of the ſyſtem is required for the action of the exciting cauſe or cauſes of this fever. The particular nature, however, of that ſtate, has not hitherto been aſcertained. That it depends upon the condition of the nervous ſyſtem, there is every reaſon to believe; but our ignorance of the laws by which that ſyſtem is regulated, prevents us from approaching nearer to a ſolution of the queſtion. Perſons of all ages, and of both ſexes, are ſubject to the diſeaſe. While ſome appear wonderfully ſuſceptible of it; others, though conſtantly expoſed to the exciting cauſes, are not affected by them: thus, for example, medical practitioners and nurſe-tenders are ſeldom infected with fever; and criminals from a jail have been known to communicate contagion to numerous perſons in a crowded court, although they themſelves were in good health.

Exciting Causes. The variety of circumſtances which have been commonly regarded as exciting cauſes of nervous fever, has tended much to perplex thoſe who have attempted to inveſtigate the nature of this ſpecies of fever. Expoſure to cold, as it is termed; diſorders in the primæ viæ; intemperance; violent paſſions of the mind; fatigue of mind or body; corrupted animal exhalations; exhalations from the putrefaction of vegetables; a particular ſtate of the atmoſphere, from the viciſſitude of ſeaſons, or the ſucceſſion of weather; confined human effluvia; and contagion, have been enumerated as the exciting cauſes.

1. *Expoſure to Cold.* This has been reckoned by the common bulk of mankind as a frequent exciting cauſe of fever; a circumſtance to which perhaps may be attributed its being ranked as ſuch by medical practitioners. It may be thought preſumptuous to call in queſtion an opinion, founded upon obſervation, which is ſo generally received. When, however, it is recollected, that expoſure to cold produces ſynocha, or inflammatory fever, which is a diſeaſe very oppoſite in its nature to typhus, as has been already proved; and that, beſides, it frequently induces catarrh, rheumatiſm, bowel complaints, &c. it muſt be obvious, that ſome additional circumſtance at leaſt muſt concur

concur before it can excite nervous fever. And if it be allowed that the former effects certainly do occur much more frequently than the latter has been ſuppoſed to do, it may probably appear, that expoſure to cold ought to be expunged from the liſt of exciting cauſes of the diſeaſe under conſideration.

2. *Diſorders in the Primæ Viæ.* Theſe are more probably the conſequences than the cauſes of fever: for a diſordered ſtate of the ſtomach and bowels frequently takes place, without being attended with nervous fever; whereas that ſpecies of fever, unaccompanied with derangement of thoſe viſcera, never occurs. This cauſe, however, deſerves great attention; for the ſtate of the ſtomach and its connections has certainly a remarkable influence over the whole ſyſtem. That the ordinary functions of the ſtomach are not only deranged, but even totally ſuſpended, in nervous fever, is more than probable. Dr. Fordyce, for example, mentions that he has often ſeen caſes where food, taken before the attack of fever, had remained in the ſtomach for three or four days *. But whether an impaired, deranged, or ſuſpended ſtate of its ordinary functions, be the only morbid change that happens in the ſtomach during fe-

* See A Diſſertation on Simple Fever, by George Fordyce, M.D. page 66.

ver, is a queſtion which cannot be eaſily determined. From the circumſtance already mentioned, that diſorders in the primæ viæ, impeding the functions of digeſtion, frequently occur independent of fever, it appears that ſome change not yet explained certainly happens; and it is upon this ſuppoſition that the author of theſe remarks rejects diſorders of the primæ viæ as an exciting cauſe of nervous fever.

3. *Intemperance.* The many inſtances which are obſerved where intemperance of diet is not ſucceeded by nervous fever, render it more than probable that, in thoſe few caſes where it is ſo, ſome other cauſe concurs. The immediate morbid effect of intemperance, when it appears under the form of fever, ſeems to be ſynocha, and not typhus.

4. *Violent Paſſions of the Mind, and Fatigue.* Although fear, grief, and fatigue of mind and body, have been long conſidered as exciting cauſes of nervous fever *; there is reaſon to believe that they rather contribute to produce the ſtate of the ſyſtem which prediſpoſes to that diſeaſe. Where violent paſſion, ſuch as exceſſive anger, is immediately followed by fever, it is probable

* A very late author is of the ſame opinion; vide Dr. Currie's Account of the Climate and Diſeaſes of the United States of America, page 122.

probable that the diſeaſe produced is ſynocha. The depreſſing paſſions, ſuch as fear, &c. which ſometimes occur about the firſt attack of fever, are perhaps the effects of the peculiar ſtate of the ſyſtem that had taken place at that time.

5. *Corrupted Animal Exhalations.* The exhalations from marſhes generally proceed from the putrefaction both of animal and vegetable matter, yet they induce intermittent fevers only. With reſpect to the effects of exhalations from putrid animal matter alone, nothing certain can be urged; but, upon the whole, it appears more probable that they contribute to render the effects of ſome other exciting cauſe more violent, than that they are themſelves exciting cauſes.

6. *Exhalations from Putrefaction of Vegetables.* Dr Ruſh * has adduced the moſt unequivocal proof that, on ſome occaſions, vegetables in a ſtate of putrefaction act as exciting cauſes of malignant fevers.

By the daily obſervation of mankind, however, it is clearly eſtabliſhed, that this is neither a general nor a common effect of vegetable putrefaction; and, conſequently, where it does take place, there muſt be ſome concurrence or combination of other circumſtances not yet perfectly aſcertained. The heat

* Vide Dr. Ruſh's Account of the Yellow Fever, already referred to, p. 153. et ſeq.

heat of the climate ſeems obviouſly indeed to contribute much to this effect; but it is probably not the ſole circumſtance.

7. *A particular State of the Atmoſphere, from the Viciſſitudes of Seaſons, or Succeſſion of Weather.* The numerous hiſtories of epidemics on record * have induced many practitioners to believe, that a particular ſtate of the atmoſphere ſometimes proves the exciting cauſe of continued nervous fever. This opinion, however, ſeems founded on partial obſervation only; for it is more conſiſtent with facts, to ſuppoſe that a particular ſtate of the atmoſphere only tends to render the ſyſtem more ſuſceptible of the impreſſion of exciting cauſes. Thus, for example, we are told, that under the ſame atmoſphere two diſeaſes of a different nature prevailed univerſally at the ſame time †.

8. *Confined Human Effluvia.* That theſe excite fever there can be no doubt; the moſt inconteſtible

* Vide, Willis opera. Sydenham opera, paſſim. Morton opera. Halleri Diſputationes, vol. v. Mertens Obſervationes Medicæ de Febribus Putridis, paſſim. Cleghorn's Obſervations on the Epidemical Diſeaſes of Minorca. Moſely on Tropical Diſeaſes, page 122. Collection d' Obſervations ſur les Maladies et Conſtitutions Epidemiques, par M. Lepecque de la Cloture, pag. 836.

† Cleghorn on the Epidemical Diſeaſes of Minorca, page 136. Lind on Diſeaſes incident to Europeans in Hot Climates, p. 126.

conteſtible evidence of the fact has been adduced *.

9. *Contagion.* All the ſpecies of nervous fever are contagious; a circumſtance which forms the moſt eſſential mark of diſtinction between theſe fevers and all others. In many caſes the contagion can be diſtinctly traced. In others, although it cannot be aſcertained, there is no certainty that it did not exiſt; for ſuch is the nature of contagion, that it may be communicated not only from a diſeaſed perſon to a healthy one, but alſo may be carried about the cloaths, &c. even of a healthy perſon. In a crowded city, therefore, it is impoſſible for any individual to be certain that he has not been expoſed to contagion. Many practitioners allege that contagion is not a general exciting cauſe of nervous fever; becauſe it does not, like other contagions, as that of ſmall pox, &c. loſe the power of again infecting the ſame individual. But this argument is equally ſtrong againſt the idea of fever being produced, in any inſtance, by infection; a fact, however, which is too well eſtabliſhed to be denied. There is no inconſiſtency

* "At the Lent aſſizes in Taunton, 1730, ſome priſoners who "were brought thither from Ivelcheſter goal infected the Court; "and Lord Chief Baron Pengelly, Sir James Sheppard, Serjeant, "John Pigot, Eſq. Sheriff, and ſome hundreds beſides, died of "the goal diſtemper." See The State of the Priſons in England and Wales, by John Howard, F. R. S. p. 18.

cy in imagining, that the different ſpecies of contagion are regulated by different laws, as it is found that they produce different effects. With reſpect to the nature of the contagion of fever, nothing but conjecture can be offered; which is not ſurpriſing, ſince that of the contagion of ſmall pox, although it can be made the object of our ſenſes, which that of fever cannot, properly ſpeaking, be, is ſtill unknown. From the ſimilarity of their effects, it is probable that it coincides, in ſome eſſential qualities, with human effluvia. Perhaps, alſo, the peculiar ſmell which proceeds from human effluvia, and from the bodies of thoſe affected with nervous fever, being nearly of the ſame kind, affords an additional argument in favour of that conjecture.

Upon the whole, it is preſumed, that human effluvia, putrid exhalations under certain circumſtances, and contagion, are the ſole exciting cauſes of continued nervous fever; and that expoſure to cold, diſorders in the primæ viæ, intemperance, violent paſſions of the mind, fatigue of mind or body, corrupted animal exhalations, and a particular ſtate of the atmoſphere from the viciſſitude of ſeaſons or the ſucceſſion of weather, act only by inducing that ſtate of the ſyſtem which renders it ſuſceptible of the impreſſion of the exciting cauſes.

An inveſtigation of the exciting cauſes of diſeaſe has been regarded as uſeful in two points of view:

Firſt, In order that means may be ſuggeſted for the prevention of diſeaſes; and *Secondly*, For the purpoſe of aſcertaining the proximate cauſe. The firſt of theſe views alone, indeed, has been generally avowed; but the pains which moſt ſyſtematic writers have taken to explain the mode of action, or the effects of exciting cauſes, clearly ſhow that they have been actuated by the ſecond view alſo. If future obſervation ſhall eſtabliſh the validity of an opinion lately propoſed by Dr Fordyce, that a fever produced by any cauſe, like a body put in motion by an impulſe, will continue, although that cauſe be no longer applied *; it will then appear neceſſary only to enquire into the exiſtence of exciting cauſes, and not into their mode of operation. As Dr Fordyce has not yet produced the evidence on which his opinion is founded, it cannot be regarded as unfair, if aſſent be refuſed to the doctrine as applying generally to all fevers. It is a well known fact, for example, that intermittent fever often reſiſts obſtinately every means of cure, and yields only in conſequence of a removal from expoſure to the exciting cauſe.

Proximate Cause. The modern opinions reſpecting the proximate cauſe of nervous continued fever may be arranged under five heads.

* Vide Fordyce's Diſſertation on Simple Fever, page 171.

1. The introduction of a morbid matter into the ſyſtem.

2. Lentor of the blood.

3. Impaired energy of the brain, with ſpaſm of the extreme veſſels.

4. Simple debility.

5. An over proportion or accumulation of carbon and hydrogen, and conſequently a diminution of oxygen, and an exhauſted ſtate of irritability.

1. *The introduction of a morbid matter into the ſyſtem.* This is a very old opinion, and, among the vulgar, a very common one. The principal modern authors who have adopted it are, Sydenham, and Dr Balfour. Dr Sydenham imagines that a materies febricalis is introduced into the blood; and that a commotion is therein excited, by which the matter is either ſeparated and expelled, or the blood itſelf is changed into a new ſtate *. Dr Balfour's opinion is, that the contagious matter being conveyed into the ſtomach and bowels, infects the mucus lining the inteſtines, which being abſorbed and mixed with the blood produces the febrile ſtate †.

Several

* Vide The Works of Dr Sydenham, tranſlated by Dr Wallis, vol. i. chap. 4.

† See A Treatiſe on Putrid Inteſtinal Remitting Fevers, by Francis Balfour, M. D. p. 16. et ſeq.

Several ſtrong objections, founded upon the progreſs and event of fevers, may be urged againſt this theory; but theſe it is unneceſſary to adduce: for, although the alleged alteration in the ſtate of the blood were proved, the introduction of morbid matter into the ſyſtem could be conſidered as an exciting cauſe of fever only, and not the proximate one. No change, however, of the blood, has hitherto been demonſtrated as taking place invariably in every caſe of fever. On the contrary, numerous facts concur to render it more than probable, that, ſo far as our ſenſes can determine, the only changes which blood undergoes in fevers of this kind, are thoſe which proceed from the action of the blood-veſſels, and the deranged ſtate of the chylopoetic viſcera; and hence ſuch changes are the effects, and not the cauſes of fever.

2. *Lentor of the Blood.* This opinion, propoſed originally by Boerhaave, has been already explained, page 25. The objections already urged againſt it, page 26, ſufficiently evince its inconſiſtency with facts.

3. *Impaired Energy of the Brain, with Spaſm of the extreme veſſels.* This theory has been alſo already explained, page 26. That it is inadequate to the explanation of the phenomena of continued fever, is preſumed from the two following circumſtances.

1*ſt*, Continued fevers are not always preceded

by a cold fit, nor by the other ſymptoms regarded as denoting ſpaſm of the extreme veſſels. And,

2*dly*, The energy of the brain is not always reſtored on the ceſſation of the fever; for imbecillity of mind, which often continues for a conſiderable time, is the frequent conſequence of that diſeaſe.

Theſe objections to the doctrine of ſpaſm are ſelected as being incontrovertible. Others, founded upon the inconſiſtency of the ſeveral parts or principles which conſtitute the theory, might have been urged.

4. *Simple Debility.* This theory ſcarcely requires a ſingle argument to prove its inſufficiency, to any one who conſiders for a ſingle moment the morbid ſtates of the human body. If the debility which occaſions fever be a particular degree only in a ſuppoſed ſcale between ordinary health and the termination of life, then every dropſical patient ſhould be affected with fever: and if it be a particular ſpecies of debility; that is to ſay, debility attended with peculiar circumſtances, then the theory is merely a play upon words.

5. *An over Proportion or Accumulation of Carbon and Hydrogen, and conſequently a Diminution of Oxygen, and an exhauſted State of Irritability.* This theory, founded upon the modern improvements in chemiſtry, has been lately propoſed by Dr. Wood of Newcaſtle.

Newcaſtle *. He proceeds upon the ſuppoſition that a certain proportion of oxygen muſt neceſſarily be received during every inſpiration into the ſyſtem, and that when this does not happen, carbon and hydrogen gaining aſcendancy, a putreſcent ſtate of the ſyſtem takes place.

An inſuperable objection occurs againſt this theory; viz. That the diminiſhed proportion of oxygen muſt depend on ſome peculiarity of action of the ſyſtem in the perſon affected. For, as all mankind have acceſs to the ſame grand magazine of oxygen, the atmoſphere; (to uſe Dr. Wood's own expreſſion) no individual could be affected with fever, while others eſcaped, unleſs the reception of oxygen, or the modification or diſtribution of the air we breathe, did depend upon corporeal mechaniſm †. Allowing, therefore, what is by no means

* Thoughts on the Effects of the Application and Abſtraction of Stimuli on the Human Body, by James Wood, M. D. &c. p. 60.

† Dr. Wood, in ſupport of his theory, very properly adduces practical ſucceſs in addition to hypothetical reaſoning. Proceeding upon the principle, that the acid of nitre, combined with potaſh, taken into the ſtomach, communicates to the ſyſtem the oxygen which it contains; he regards the invariable ſucceſs that attended the adminiſtration of a ſolution of nitre in a great many caſes of typhus, both under the care of his father and himſelf, as a complete demonſtration of the infallibility of his principles. When, however, it is conſidered, that the ſolution (conſiſting of a drachm of nitre in eight ounces of water) was given in doſes of

means proved, that an accumulation of carbon and hydrogen, with the conſequences ſtated, do actually happen in fever; they are to be regarded as effects, and not as cauſes.

Upon the whole, it is obvious, that none of the modern theories above enumerated afford a rational explanation of the proximate cauſe of continued fever; and it may be preſumed that, from the complication of morbid ſymptoms which occurs in that diſeaſe, no ſuch explanation can be given, until the laws, by which the nervous, the lymphatic, and the ſanguiferous ſyſtem are regulated, and the mutual dependence that each has upon the other, be better underſtood.

REMARKS on the Cases of Continued Nervous Fever.

The moſt general appearance on diſſection obſerved in the preceding caſes is, effuſion within the cranium. Yet in two caſes, viz. the fifteenth of typhus mitior, and the firſt of typhus gravior, every

of an ounce or ſometimes two ounces every two or three hours; it may be eaſily underſtood, by one acquainted with the elements only of chemiſtry, that before the half of the ſolution could be exhibited it muſt have loſt all power of giving out oxygen.

every thing within that cavity was found: conſequently the moſt general appearance ſeems to be an effect which does not invariably take place.

With reſpect to the different morbid appearances in the cavities of the thorax and abdomen, in the caſes under conſideration, they are to be regarded as accidental circumſtances, only depending upon cauſes, to be afterwards explained.

SECT. II. *INTERMITTENT FEVERS.*

INTERMITTENT FEVERS * are thoſe where a perfect remiſſion takes place, for a longer or ſhorter time, between the paroxyſms. Each paroxyſm conſiſts of a regular cold, hot, and ſweating fit; the phenomena of which are the following At firſt the patient complains of weakneſs, attended with yawning and ſtretching of his limbs; followed

* For a deſcription of intermittent fevers, ſee, Boerhaave's Aph. 749, 756, 751; and Van Swieten's Commentaries on theſe. Conſpect. Junckeri, pag. 651, et ſeq. Ooſterdyk Preſcripta Medicinæ, pag. 61. Cleghorn on the Diſeaſes of Minorca, page 147. Sydenham, tranſlated by Wallis, vol. i. page 75. An accurate deſcription of the general ſymptoms of each paroxyſm is given by Dr. Cullen, par. x. et ſeq.

ed by a certain ſenſation of uneaſineſs in the back and in the points of the fingers. Theſe ſymptoms are ſucceeded by ſhivering, and a ſenſe of great cold; although in fact the body is warmer than natural. Nauſea, vomiting; pain of the limbs, of the back, and of the head; and difficult and anxious reſpiration, then take place. The pulſe at the ſame time is quick, feeble, ſmall, and wire-like; and can be ſcarcely reckoned on account of the tremors of the body. The urine is limpid. This ſtage laſts for one, two, or more hours.

The cold fit having gradually ceaſed, moſt intolerable heat is felt; the pulſe becomes full, ſtrong, and hard; the reſpiration leſs difficult, but ſtill anxious. The tongue is white, attended with great thirſt; and the ſenſation of exceſſive heat is felt about the præcordia. Headach, and ſometimes delirium, ſupervene; and alſo pain, and in ſome caſes ſwelling, about the region of the ſtomach. The nauſea and vomiting often continue during this ſtage. The urine is of a red colour. Blood drawn during this ſtage is commonly thicker than uſual; containing a ſmall proportion of ſerum, and having a leſs firm coheſion of its particles than natural. In ſome caſes the upper part of the craſſamentum is red, and the under part black. After the hot fit has continued for one, two, or more hours, a copious ſweat breaks out over the whole body. All the ſymptoms then become al-

leviated, and after the ſweat has laſted for three or four hours totally diſappear. The urine depoſites a ſediment. Sleep takes place; and the intermiſſion is completely eſtabliſhed, a ſenſe of weakneſs only remaining. After a certain interval, in ſome caſes longer, in others ſhorter, the ſame phenomena again recur in the ſame ſucceſſion.

Authors have divided intermittents into different ſpecies, according to the length of time interpoſed between the beginning of one paroxyſm and that of another. Thus: where a regular fit of the diſeaſe takes place every twenty-four hours, it is named a Quotidian; if every forty-eight hours only, a Tertian; and if ſeventy-two hours intervene between the beginning of one fit and that of another, it is named a Quartan. Beſides theſe, other diviſions have been adopted, founded upon the irregularity of recurrence of the fits; as, the Semitertian, Double Tertian, Triple Tertian, &c. As intermittents occur moſt frequently during the Spring and Autumn, they have alſo been divided into Vernal and Autumnal; and it has been found that tertians and quotidians moſt frequently prevail in the former ſeaſon, and quartans in the latter. Not contented with theſe diviſions, authors have diſtinguiſhed intermittents from each other according to the anomalous ſymptoms with which they are ſometimes complicated. Accordingly,

ingly, as the diſeaſe is occaſionally attended with violent fixed pain in the bowels, with faintings, with ſymptoms of apoplexy, or with pains in the liver, ſpleen, or kidneys; it has by different authors been ſtyled, Affodes Syncopalis, Apoplectica, Hepatica, Splenetica, Nephralgica, &c. Theſe diſtinctions, however, ſeem to ſerve no uſeful purpoſe; tending rather embarraſs than to inſtruct. It may be queſtioned too, how far the diviſion, founded upon the intervals between the beginning of one paroxyſm and that of another, is of practical utility; ſeeing, that during the courſe of the diſeaſe the intervals frequently become protracted or ſhortened: ſo that what was originally a quotidian ſhall degenerate into a tertian or quartan, and what was at firſt a tertian ſhall be converted into a quotidian. Sometimes too the paroxyſms ſucceed each other ſo rapidly, that no regular intermiſſion occurs; there being only a temporary alleviation of the ſymptoms, or remiſſion as it has been called. Such caſes have been named Remittents. For theſe reaſons, it is impoſſible to aſcertain, at the firſt attack of an intermittent, the exact form which it will aſſume: for although, as already ſtated, tertians and quotidians are moſt frequent during Spring, and quartans and remittents prevail principally during Autumn; and although when the fit begins at noon the diſeaſe moſt generally aſſumes the tertian form,

and

and when in the evening the quartan type, there are ſo many exceptions to thoſe rules, that no dependence whatever can be placed upon them.

Intermittents are much more dangerous in warm climates than in temperate regions. In Great Britain the diſeaſe in many caſes terminates ſpontaneouſly after a few fits, and leaves the patient nearly in a ſtate of perfect health. In other caſes it reſiſts obſtinately every remedy; and induces ſo great a degree of weakneſs throughout the whole ſyſtem, that chronic diſeaſes of an alarming nature, depending upon viſceral obſtructions, are induced. It often happens too, that, after the diſeaſe has continued obſtinately for a conſiderable length of time, it ceaſes entirely upon the removal of the patient from the local ſituation or place of reſidence in which he had become affected with the diſeaſe; provided the change be made into what is called a dry atmoſphere. In warm climates, on the contrary, not only do intermittents terminate in diſeaſes which become rapidly fatal, as apoplexy, dyſentery, &c. but often alſo do they prove immediately fatal. In ſome caſes death takes place during the cold fit; but moſt generally it happens during the hot one. Where the patient is not carried off by the firſt attack, the fever becomes commonly irregular previous to its fatal termination. The favourable ſymptoms commonly enumerated are: *Firſt*, Regularity in the ſta-

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ges of the fit; *Secondly*, The abſence of violent pains in the bowels during the fits; *Thirdly*, The ſeveral ſtages of the fit not occupying above twelve hours; *Fourthly*, The patient being, with reſpect to the animal and natural functions, nearly in a ſtate of health during the intermiſſions; *Fifthly*, The urine depoſiting a ſediment; and *Sixthly*, The eruption of puſtules about the lips on the apparent declenſion of the diſeaſe. The unfavourable ſymptoms, on the contrary, are: *Firſt*, Irregularity in the periods of attack, and in the occurrence of the ſtages of the fit; *Secondly*, The fits becoming about the third or fourth period of the diſeaſe much protracted, the intermiſſions conſequently being greatly ſhortened; *Thirdly*, Coma, delirium, great anxiety, painful ſwelling and induration about the hypochondria and epigaſtric region, pain about the upper orifice of the ſtomach or loins, occurring during the fits; *Fourthly*, The patient, during the intermiſſions, having a total averſion for food, and feeling ſuch weakneſs, attended with vertigo, that he can ſcarcely walk; *Fifthly*, The frequent appearance of numerous blotches on the ſkin like the ſtinging of nettles; *Sixthly*, The urine continuing thin, clear, high coloured, or being covered with an aſh-coloured membrane like a cobweb; *Seventhly*, Hæmorrhages from the noſe, vomiting, colliquative ſweats, or diarrhœa, taking place; and *Laſtly*, The patient lying conſtantly

ſtantly on his back, with a ghaſtly countenance, eyes half ſhut, and mouth open; while at the ſame time the belly is ſwelled to an enormous ſize, and obſtinate coſtiveneſs attends, or involuntary diſcharge of the feces happens *. Intermittents frequently terminate alſo in continued fevers.

The appearances on diſſection, in thoſe who die from this diſeaſe, according to Dr Cleghorn, who examined near one hundred bodies, exhibit conſtantly a blackneſs or total corruption of one or other of the adipoſe parts in the lower belly, as the omentum, meſentery, colon, &c. enlargement of the ſpleen; together with ſuch a ſoftneſs and rottenneſs of its ſubſtance, that it has more the appearance of coagulated blood wrapped up in a membrane, than of an organic part; the gall-bladder full and turgid; and the ſtomach and inteſtines overflowing with bilious matter. No extraordinary appearance was obſerved in the cavity of the thorax or head, except the effuſion of yellow ſerum where the ſkin had been tinged with that colour.

CASES

* For a more particular account of the ſymptoms, by which a judgement can be formed of the probable event of intermittent fevers, ſee Dr. Cleghorn on the Diſeaſes of Minorca, p. 167, et ſeq. from whoſe obſervations the above detail is chiefly borrowed.

CASES of Intermittent Fever.

Case I. (xxv. 4.)

A clergyman, aged ſixty years, who had been troubled for about thirty years with weakneſs of the head and ſtomach, thirſt, ſudden faintings, eſpecially when he was in the erect poſture, together with a ſenſe of ſtraitneſs of his cheſt, and with an intermiſſion of the pulſe, became at laſt affected with a double tertian fever. The fever having grown every day more violent, at laſt terminated fatally.

Appearances on Diſſection.

Abdomen. The omentum was very large, and was twiſted like a rope. The right kidney was wanting; and there were no traces of the correſponding renal veſſels. The left kidney was of the natural ſize, and contained a hydatid full of fluid.

Thorax. In the right ventricle of the heart there was a pretty large polypous concretion, which extended a conſiderable way into the vena cava. In the left a concretion of a ſmaller ſize, that went into the pulmonary vein, was obſerved.

Head. A conſiderable quantity of fluid was found within the ventricles of the brain. The glands on the plexus choroides appeared very much ſwelled.

Case

Case II. (xlix. 8.)

A virgin, aged twenty two years, having been affected for many years with a double tertian, and eventually an acute, fever, attended with a pain in the head and the whole body, was thereby carried off.

Appearances on Diſſection.

Abdomen. At the extremity of the ileum, in that part which is connected with the meſentery, ſeveral ſmall bodies projected, which in magnitude, form, and colour, reſembled the granules of gunpowder. On the internal ſurface of the uterus ſeveral round bodies like glands were obſerved, on the rupture of which a viſcid humour was diſcharged.

Thorax. The lungs were ſlightly inflamed in thoſe parts placed towards the back. The right ventricle of the heart contained a polypous concretion.

Case III. (lix. 18.)

A little boy, affected with tertian fever, became quite emaciated; and at laſt, violent convulſions having ſupervened, died.

Appearances on Diſſection.

Abdomen. The inteſtines appeared drawn in towards

towards the meſentery, which was contracted; and their coats were ſomewhat rigid, and as it were dried. They contained, as did alſo the ſtomach, a great quantity of æruginous bile, which ſtained the ſcalpel of a violet colour. Two pigeons being ſlightly wounded with a knife dipped in the ſame bile, ſo that the bile remained in the wound, in a ſhort time became affected with tremors, and died convulſed. A cock, too, who had ſwallowed a piece of bread ſoaked in that bile, died in a ſimilar manner.

CAUSES OF INTERMITTENT FEVER.

PREDISPONENT CAUSE. It has of late become faſhionable to regard debility as the univerſal prediſponing cauſe to diſeaſes; accordingly, it has been alleged to be that of intermittent fever. Unleſs, however, the term debility be underſtood in a very unuſual ſenſe, viz. as being an impaired degree of action of ſome of the functions either natural or animal, and not of the whole, it cannot be deemed prediſponent to that diſeaſe: for it is well known, that perſons apparently in the full vigour of health are liable to the attacks of intermittents. The circumſtance prediſpoſing to the diſeaſe muſt be that which renders the body ſuſceptible of the impreſſion of the exciting cauſe; it may therefore

exiſt in one organ only, or in ſeveral, or in all. The concurrence of many circumſtances renders it probable that, in intermittent fever, the prediſpoſition takes place principally in the ſtomach or alimentary canal; but our knowledge of the nature of the proceſſes carried on in thoſe organs is at preſent too imperfect, to enable us to ſpecify the particular deviation from nature which conſtitutes or occaſions that prediſpoſition. It is a remarkable fact, that, after intermittents have once occurred in any individual, a ſtrong prediſpoſition to the return of the diſeaſe for ever after remains in that individual.

Exciting Cause. It is now univerſally acknowledged that the moſt frequent exciting cauſe at leaſt is the effluvia or vapour ariſing from ſtagnant water or marſhes, which have been ſtyled Marſh Miaſmata. It has been thought neceſſary to aſcertain the properties of thoſe effluvia, in order to diſcover their mode of action; and accordingly many ingenious conjectures have been formed on the ſubject. As the effluvia proceeding from great lakes, ſalt water, and fogs, do not produce intermittent fevers, it has been ſuppoſed that thoſe which do ſo, conſiſt of ſomething more than ſimple watery particles. In marſhes, the putrefaction both of vegetable and of animal matter is commonly always going forward; and hence the

moſt general conjecture has been, that vegetable or animal putrefaction imparted a peculiar quality to the watery particles of thoſe effluvia. Some well-atteſted facts, however, clearly overturn this opinion. Thus, for example, Dr Ruſh aſſerts that intermittent fevers were totally unknown in ſeveral counties of Penſylvania, until the eſtabliſhment of mill ponds *. Dr Fordyce mentions too, "that during the war which took place in Flanders between the tenth and eleventh years of the preſent century, an army encamped upon ſandy ground, in which water was found in digging leſs than a foot deep, and occaſioned a great moiſture in the air; which produced in a few days numbers of fevers, although the army was perfectly healthy before; and no more fevers were produced on ſhifting their ground †." It may therefore be concluded, that we are not yet acquainted with all the circumſtances which are required to render marſh miaſmata productive of intermittents. When it is recollected that intermittents are moſt frequent in warm climates, and in thoſe climates prevail moſt generally during warm weather, it is moſt obvious, that the atmoſphere

* Vide, Medical Obſervations and Enquiries, by Benjamin Ruſh, M.D. vol. ii. p. 265.

† See, A Diſſertation on Simple Fever, by George Fordyce, M.D. p. 147.

ſphere muſt have a conſiderable influence in promoting the action of the miaſmata; but with reſpect to the particular nature of that influence nothing more than conjecture can be offered.

It has been imagined, by ſome reſpectable authors *, that intermittent fevers are communicated by contagion. This opinion, however does not coincide with the general obſervation of practitioners; and if it were juſt, it muſt have been long ago eſtabliſhed beyond the poſſibility of contradiction. The author of theſe remarks has converſed on this ſubject with ſeveral judicious practitioners, who have practiſed for many years in the countries where intermittents prevailed; and he has been uniformly aſſured, that in no inſtance could they ever trace the origin of the diſeaſe to contagion.

Many other circumſtances have been alſo regarded, by different authors, as exciting cauſes of intermittent fever; ſuch as, fear, expoſure to cold, watery diet, as that conſiſting of particular fruits, namely, water melons, cucumbers, &c. and the ſuppreſſion of habitual evacuations, or receſſion of cutaneous eruptions. But it is, perhaps, more than probable that theſe circumſtances act only by inducing that ſtate of the body which prediſpoſes to

* Dr Cleghorn, p. 132. Dr Fordyce's Obſervations on Simple Fever, p. 111.

the diſeaſe; ſince there are many countries where intermittents never occur, although ſome of the inhabitants muſt inevitably be often affected with fear, and expoſed to cold, and have occaſionally a ſuppreſſion of habitual evacuations, or the receſſion of cutaneous eruptions.

Upon the whole, therefore, it may be concluded, that the ſole exciting cauſe of intermittent fever is a ſtate of the atmoſphere ariſing principally from the evaporation of water, but not proceeding ſolely from that circumſtance, being influenced by other cauſes not yet aſcertained. The late Dr Cullen regarded marſh miaſmata to be the ſole exciting cauſe. But proof has been adduced above, that the evaporation from damp ground, and from mill ponds, produces the ſame diſeaſe; and it may be added that, in ſome countries, after having been long prevalent, intermittents diſappear entirely *; while, in other countries, where they never occurred, they become frequent, although there be no remarkable change on thoſe countries with reſpect to marſhes. Beſides, in certain warm climates where there are no marſhes, intermittent fevers prevail during the rainy ſeaſon †.

PROXIMATE

* See Dr Currie's Hiſtorical Account of the Climate and Diſeaſes of the United States of America, page 8.

† See Dr Moſely on Tropical Diſeaſes, p. 14.

Proximate Cause. Thoſe who conſider all fevers to be eſſentially of the ſame nature, differing only from each other in ſymptoms which are influenced by a peculiarity of habit, or of ſituation, have aſcribed the phenomena of every ſpecies to the ſame proximate cauſe. It is obvious, however, from the obſervations formerly made, that continued fevers are perfectly diſtinct from intermittents, in their eſſential characters, in their progreſs, and in their exciting cauſe; and conſequently, it is unphiloſophical to allege that they depend upon the ſame proximate cauſe.

Neither lentor of the blood, nor impaired energy of the brain, nor ſpaſm of the extreme veſſels, nor ſimple debility, nor an over proportion or accumulation of carbon and hydrogen, can be regarded as the proximate cauſe of intermittent fever.

A redundancy of bile in the ſtomach and inteſtines has been by ſome propoſed as the proximate cauſe of that diſeaſe; but not only is the bile often accumulated in great quantity in theſe viſcera, but alſo is it even mixed with the blood throughout the whole ſanguiferous ſyſtem, without any ſuch effect being produced.

When the phenomena of intermittent fever are carefully conſidered, many circumſtances appear in favour of the old opinion of Helmont, that they proceed

proceed from ſome affection of the ſtomach. The ſhivering, the ſickneſs, the thirſt, the pain in the head, all ſeem to originate from this cauſe. The appearances on diſſection, too, in thoſe who die of the diſeaſe, prove clearly that the ſyſtem of the ſtomach is very materially affected. But the circumſtance which chiefly favours this opinion is, the great ſuſceptibility of a renewal of the diſeaſe from very ſlight exciting cauſes; as, from the prevalence of the eaſt wind, and from the repetition of the original exciting cauſe. In this circumſtance intermittents differ eſſentially from all other fevers: for it is well known, that after continued fever has once occurred, the perſon ſo affected is by no means ſo liable to a return of the diſeaſe as one in whom the diſorder has never taken place. In eruptive fevers too, as in the ſmall-pox and meaſles, the fever produced by the contagious matter can never be again produced in the ſame perſon. It may be added, in confirmation of all this reaſoning, that medicines, received into the ſtomach previous to an expected paroxyſm of intermittents, ſometimes produce almoſt immediate effects by preventing entirely the fit. But although it were admitted, that the proximate cauſe of the diſeaſe is a deranged ſtate of the ſtomach and its appendages, it would ſtill remain for enquiry to aſcertain what that deranged ſtate is.

Our

Our preſent imperfect knowledge does not enable us to enter on ſuch an enquiry.

OBSERVATIONS ON THE CASES OF INTERMITTENT FEVER.

THE preceding caſes afford very little evidence reſpecting either the cauſe or effects of intermittents; and afford, too, very little room for remark. In the firſt caſe, no morbid appearance was noticed in the ſtomach; but a conſiderable quantity of fluid appeared within the cranium. The ſecond caſe is an example of the intermittent having terminated in continued fever. In the third caſe, the over proportion of bile frequently obſerved in that fever was found; but none of the other appearances enumerated by Dr. Cleghorn, and already ſtated in theſe pages, were ſeen.

GENERAL OBSERVATIONS ON FEVERS.

THE importance of the ſubject induces the author of theſe remarks to deviate from his general plan, by offering a few additional obſervations on fevers.

In the preceding pages, ſynocha, typhus, and intermittents, are regarded as diſeaſes very different

in their nature. Since, however, an oppoſite doctrine, founded on very plauſible arguments, has been received among practitioners of the firſt eminence, it cannot be deemed improper to inveſtigate the queſtion at ſome length.

The firſt argument in favour of the opinion, that all fevers are of the ſame nature, is, That perſons of different habits of body, expoſed at the ſame time to the exciting cauſe of fever, have fevers of a different ſpecies. Thus Guido Fanno mentions, that an epidemic prevailed at Leyden, during the Summer of 1669, which affected ſome perſons with continued fever, and others with intermittent *.

In contradiction to this argument, it is to be obſerved, that where a number of perſons of oppoſite temperaments have been expoſed to the ſame exciting cauſe, although ſome anomalous ſymptoms appeared in particular inſtances, the fevers in conſequence have proved eſſentially of the ſame nature †. With reſpect to the epidemic at Leyden, it is not inconſiſtent with obſervation to allege that two different ſpecies of epidemics had prevailed at the ſame time; for it is well known that this ſometimes happens. Dr. Hillary, for example,

* Vide Haller's Diſput. Pathol. p. 204.

† Vide Sir John Pringle's Obſervations on the Jail or Hoſpital Fever, § 2.

ample, remarks, that dyſentery and catarrhous fever were, during 1757, epidemic at the ſame time in the iſland of Barbadoes *.

The ſecond argument in favour of this doctrine is, That intermittents ſometimes degenerate into continued fever, and *vice verſa*. Many aſſertions of this circumſtance occur in the writings of authors of the firſt eminence †. It muſt however be allowed, that the evidence on the ſubject is ſomewhat ambiguous: for in certain places of Great Britain, as in the fens of Lincolnſhire, &c. intermittents are known to exiſt for a great length of time without being converted into continued fevers; and in thoſe parts of the Iſland where intermittents do not prevail, continued fevers are never obſerved to terminate in intermittents. The argument under conſideration, therefore, is not ſupported by the phenomena of fevers in Great Britain; but reſts entirely on thoſe which appear in warm climates. The evidence in that reſpect nevertheleſs is not perfectly ſatisfactory. Dr. Cleghorn ſays, that the tertian fevers epidemic in Minorca, "about the time of the equinox, aſſume a ſurpriſing variety of forms; and very often counterfeit continued

* Obſervations on the Epidemic Diſeaſes in Barbadoes, by Wm. Hillary, M. D. page 125.

† Vide Cullen's Firſt Lines, par. xxx. & xxxi.

ed fever, having long redoubled paroxyſms *." May it not therefore be preſumed, that the inaccurate obſervation of practitioners is the only foundation for the opinion, that fevers in warm climates ſpontaneouſly vary their type during their progreſs? Beſides, although it were proved beyond the poſſibility of doubt, that intermittents terminate in continued fever, and *vice verſa;* no evidence is thereby afforded that the diſeaſes are of the ſame nature: for, by ſimilar evidence, dyſentery and intermittents ſhould alſo be of the ſame nature, ſince they too, under certain circumſtances, are apt to terminate in each other †.

But the principal circumſtance by which the doctrine alluded to has acquired influence, is the commonly received opinion, that fevers are produced by a number of exciting cauſes of an oppoſite nature. If contagion, human effluvia, marſh miaſmata, expoſure to cold, fatigue, intemperance, and paſſions of the mind, all ſeverally induce the ſame diſeaſe; it muſt follow, that the varieties in the ſymptoms obſerved, in particular inſtances, depend upon peculiarity of conſtitution, and not upon the nature of the diſeaſe.

Although, in the preceding pages, the author of

* Cleghorn, loco citato, page 185.

† Vide Cleghorn's Obſervations, p. 134; and Dr. Moſely on Tropical Diſeaſes, p. 121.

of theſe remarks has alleged, that expoſure to cold, paſſions of the mind, intemperance, &c. where they do excite fever, produce only ſynocha; that ſpecific contagion, a peculiar ſtate of vegetable putrefaction, and human effluvia, are the ſole exciting cauſes of typhus; and that marſh miaſmata, and the vapour ariſing from ſtagnant water, under certain circumſtances, are the only exciting cauſes of intermittents; he is well aware that ſeveral objections may be urged againſt the opinion. Some of theſe have been already noticed, and, it is thought, repelled. One however ſtill remains to be conſidered; viz. That during the convaleſcence ſucceeding typhus, expoſure to cold, intemperance, paſſions of the mind, &c. are frequently obſerved to occaſion what is termed a Relapſe, or a return of the diſeaſe, which had diſappeared. Any reaſoning upon this fact muſt be avoided in this work; as it would lead to diſcuſſions by far too extenſive. The circumſtance probably depends upon that law of the animal oeconomy, by which recently deranged functions are very readily again affected.

SECT. III. *HECTIC FEVER.*

HECTIC FEVER, being ſymptomatic of ſome previous diſeaſe, never invades ſuddenly; but attacks the patient by ſlow, and in general inſidious, approaches *. In this diſeaſe there are two exacerbations every twenty-four hours; in which reſpect in coincides with remittent fever. The firſt of theſe exacerbations occurs about noon; and the ſecond towards the evening. Each of them is uſhered in by a chilly fit; not always diſtinctly marked, as it appears often to be nothing more than an increaſed ſuſceptibility of the impreſſion of cold. A dry burning heat ſoon ſucceeds; attended with a florid red colour in the cheeks. This colour however is confined within a circumſcribed ſpot. The pulſe is frequent in the number of pulſations, and quick in the contraction of the artery; and at that time pretty full. The tongue is clean, as it commonly is through the

* For an accurate deſcription of hectic fever, ſee Dr. Cullen's Firſt Lines, par. 858, et ſeq.; and Medical Tranſactions, vol. ii. page 1.

the whole of the diſeaſe. Some degree of thirſt is felt. There is ſeldom any headach; and never, till towards the fatal termination of the complaint, any delirium. The urine is high coloured; depoſites a red branny ſediment; and is ſometimes covered with a fatty film. The patient feels a certain uneaſineſs; more remarkably obſerved during the evening exacerbation, as it induces reſtleſsneſs and watching; but he is unable to aſcertain the circumſtance from which his uneaſineſs proceeds. By degrees the remiſſion takes place; and he thinks himſelf free from every complaint. He continues however to have a hot dry ſkin, a quick weak pulſe, a particular paleneſs in the face, a pearly whiteneſs in the eyes, and conſiderable proſtration of ſtrength. The appetite for food is often not much impaired. The mind, with very few exceptions, is chearful; no apprehenſion of danger being entertained. The belly, at the beginning, is commonly bound. As the diſeaſe advances, many of theſe ſymptoms are aggravated, and ſome additional ones occur. Thus the ſhiverings come on frequently during the hot fit. The evening exacerbations terminate in profuſe colliquative ſweats. Great emaciation of the body takes place; ſo that the hairs fall off, and the nails of the fingers become adunque. The eyes are hollow; the belly is drawn inwards; and the ſkin grows hard.

Diarrhœa,

Diarrhœa, frequently alternating with the morning ſweats, ſuperyenes. The feet are affected with œdematous ſwelling. The tongue and fauces appear inflamed, and at laſt are covered with aphthæ. Soon after which death, preceded often for ſome days by delirium, enſues.

The progreſs of hectic fever is ſo ſlow, that the death of the patient may be generally with certainty prognoſticated many weeks before it happen.

The ſeat of the diſeaſe is evidently the vaſcular ſyſtem.

Hectic fever, as already mentioned, is ſymptomatic of ſome other diſorder. The diſeaſes of which it is a ſymptom, to be noticed in this work, are; *Firſt*, Phthiſis Pulmonalis; *Secondly*, Tabes Meſenterica; and, *Thirdly*, Certain anomalous caſes of tabes.

§ 1. PHTHISIS PULMONALIS.

EMACIATION and weakneſs of the body, attended with cough, hectic fever, and moſt generally the expectoration of purulent matter *, is the beſt

* Vide Cullen Noſolog. Ed. 1785. p. 397.

beſt definition of phthiſis pulmonalis that can be given.

As this diſeaſe ariſes from exciting cauſes of oppoſite natures, and is attended in different caſes by different ſymptoms, authors have divided it into ſpecies. Some have founded their arrangement on the ſymptoms * ; others, on the remote cauſes † ; and ſome on the ſtages of the diſeaſe ‡.

The author of theſe remarks propoſes, with much diffidence, an arrangement derived from the diſeaſed ſtate of the lungs. In doing this he offers two reaſons ; *Firſt*, That he apprehends the ſymptoms of the diſeaſe to be different, according to the morbid affection of the lungs ; and, *Secondly*, That he believes ſuch an arrangement to be ſubſervient to practical purpoſes.

Phthiſis pulmonalis may therefore, in his opinion, be divided into three ſpecies ; viz. Phthiſis a Tuberculis, Phthiſis a Materia calculoſa, and Phthiſis a Vomica.

The following general obſervations are applicable to all the ſpecies of the diſeaſe.

Although

* Vide Macbride's Works, quarto edition, p. 397.

† Vide Richardi Morton Opera, p. 109. and Dr White's Obſervations on Phthiſis Pulmonalis, publiſhed by Dr Hunter of York, p. 94.

‡ Vide Cullen Noſolog. Edin. ut ſupra, p. 159 ; and Ruſh's Medical Enquiries, vol. ii. p. 111.

Although the progreſs of Phthiſis Pulmonalis be commonly ſlow, its termination, in by far the greater number of caſes, is uniformly fatal; and indeed it has been queſtioned whether recovery from the diſeaſe ever took place. The fatal termination, however, is ſometimes protracted for a conſiderable length of time.

It is remarkable that apprehenſion of danger is ſeldom entertained by the patient himſelf; for it often happens, that he ſinks under the diſeaſe without being in the leaſt ſenſible of his approaching diſſolution. But, in thoſe rare caſes, where the living principle ſeems to be extinguiſhed with great difficulty, where aphthous ulcerations appear in the fauces, and where, from confinement to bed for a conſiderable length of time having become indiſpenſible, gangrene takes place in thoſe parts of the body which ſuffer the greateſt preſſure, the patient ſeems ſenſible of his hopeleſs condition for a ſhort time before death.

It is a curious circumſtance, that this diſeaſe is ſuſpended by pregnancy, and is ſometimes cured by mania. It has been generally imagined that the life of a patient affected with phthiſis pulmonalis is protracted by pregnancy; but there is reaſon to believe the opinion to be erroneous. In order to judge of this, the ordinary progreſs of the diſeaſe, where it is uninterrupted, ought to be compared with that where it is ſuſpended by pregnancy. If this be

done, it will be generally found, that, if two women be affected with phthiſis at the ſame time, and one of them ſhall become pregnant, the other ſhall live conſiderably longer, although in her the diſeaſe proceeds uninterruptedly through its ſeveral ſtages. This circumſtance has occurred repeatedly to the obſervation of the author of theſe remarks; who has uniformly found, that women labouring under phthiſis, previous to pregnancy, ſink within two or three weeks after delivery. Experience has alſo taught him, that the diſeaſe is not always ſuſpended by pregnancy; for he has ſeen ſeveral caſes where ſuch women have died during the ſixth or ſeventh month of geſtation, ſometimes undelivered, but moſt frequently with previous abortion *.

Phthiſis generally attacks at ſome period between the age of puberty and the thirty-fifth year.

* The author ſome years ago attended a patient whoſe caſe was very ſingular. Incipient phthiſis was ſuſpended by pregnancy, and apparently cured by mania having ſupervened to delivery. For ſome months after the mania had ceaſed, the patient continued in perfect health; but ſymptoms of phthiſis then recurred, and at the ſame time ſhe became pregnant. The diſeaſe proceeded ſo rapidly, that premature labour took place about the ſixth month of geſtation; ſhe was delivered of a ſtill-born child; and expired within twenty four hours.

Phthisis a Tuberculis. This is by far the moſt frequent ſpecies of the diſeaſe. It occurs only in thoſe of a ſcrophulous habit, and in thoſe born of ſcrophulous or of phthiſical parents. It is commonly preceded by the following ſymptoms, enumerated by Dr Ruſh *; the principal of which were firſt noticed and accurately detailed by Morton †:—"A ſlight fever, increaſed by the leaſt exerciſe; a burning and dryneſs in the palms of the hands, more eſpecially towards the evening; rheumy eyes upon waking from ſleep; an increaſe of urine; a dryneſs of the ſkin, more eſpecially of the feet, in the morning; an occaſional fluſhing in one and ſometimes in both cheeks; a hoarſeneſs; a ſlight or acute pain in the breaſt; a fixed pain in the ſide; a ſhooting pain in both ſides; headach; occaſional ſick and fainty fits; a deficiency of appetite; and a general indiſpoſition to exerciſe or motion of any kind." Sometimes, however, theſe ſymptoms do not take place, or are not obſerved.

The firſt ſymptom of this ſpecies of the diſeaſe is cough, which at the beginning is generally ſlight, and unaccompanied with expectoration. After the cough has continued for a conſiderable length of time, being ſometimes more and ſometimes leſs violent,

* Ruſh's Medical Enquiries, vol. ii. p. 107.

† Vide Richardi Morton Opera, p. 39.

violent, and being aggravated by the moſt apparently trifling cauſes; hoarſeneſs of the voice, a ſenſe of weight and ſtraitneſs in the cheſt, felt more eſpecially after motion; inability to lie on one or both ſides, and ſlight difficulty of breathing ſupervene. The pulſe from the firſt is frequent, and for a conſiderable time full and hard. The breathing is much quicker than that of a perſon in health. It is performed with great motion of the cheſt, and is frequently accompanied with a noiſe ſimilar to that of ſighing. The cough gradually becomes more violent; it attacks by fits, which are particularly diſtreſſing towards the evening and during the night; and the expectoration of mucus, and afterwards of pus, takes place. Theſe ſymptoms are attended with occaſional flying ſtitches in the breaſt and ſides, great laſſitude, emaciation of the body, and inequality of temper. The appetite for food is diminiſhed, and vomiting frequently occurs after eating. Blood is generally ſpit up, ſometimes in ſmall and ſometimes in large quantities; often before any appearance of matter can be perceived, and not unfrequently along with pus. The expectoration, therefore, at this period of the diſeaſe, is various in its appearance; ſometimes reſembling mere mucus; at other times, pus, blood, or a mixture of both; ſo that it is of very various colour and conſiſtence; being at times white, grey, brown, yellow, red,

and green, and ſometimes ſtreaked with all theſe colours; and being at one time thick, at another time thin, and in ſome caſes being tough, and imitating the figure of the branches of the bronchia. It is often difficult, at the beginning, to aſcertain whether the matter expectorated be mucus or pus. Many experiments have been made, with the view of eſtabliſhing a criterion between the two. This however, ſtill remains a deſideratum, probably for the reaſon mentioned by Dr. Stark, viz. that the ſpitting of conſumptive perſons combines the eſſential properties of mucus and of pus*.

To the ſymptoms above enumerated, hectic fever is added. The progreſs of the diſeaſe, after this period, is, comparatively ſpeaking, rapid, as it generally terminates fatally within a few months from that time.

Authors have divided the ſymptoms of this ſpecies of phthiſis into two ſtages; the firſt of which they ſtyle Inflammatory, comprehending all the ſymptoms previous to the occurrence of hectic fever; and the ſecond they term Putrid or Suppurative.

The appearances on diſſection exhibit roundiſh, white, firm bodies, of different ſizes, from the ſmalleſt granule to about half an inch in diameter, but moſt ordinarily of the ſize of a garden pea.

named

* Vide The Works of the late Dr. Stark, p. 23.

named *Tubercles*, ſituated in the cellular ſtructure which connects the air cells of the lungs together. The ſmall tubercles are frequently accumulated in cluſters. When cut into, they appear to conſiſt of a ſolid white ſubſtance, almoſt as firm as cartilage, having the cut ſurface, ſmooth, ſhining, and uniform, and being covered with a thin capſule. The larger tubercles conſiſt alſo of a curdly kind of pus; and the ſame matter is obſerved in cutting into the cluſters of the ſmaller tubercles; but its origin cannot be aſcertained. The cavity of the large tubercles always communicates with branches of the trachea. Neither cells, veſicles, nor veſſels have been diſcovered in tubercles. The branches of the trachea communicate alſo with cavities of a larger ſize (the largeſt however not exceeding four inches in extent), called *Vomicæ*. Theſe cavities contain pus of various appearances and conſiſtence in different caſes. With this they are not filled, as they have the ſurface only beſmeared with it. They are lined with a fine delicate membrane, ſimilar to the capſule of the tubercles. They communicate with branches of the trachea by round ſmooth openings, and with one another by ragged and unequal ones. They are generally ſituated towards the back part of either lobe, and are commonly concealed. Many circumſtances concur to ſhew that the vomicæ are modifications of the tubercles. The lungs contiguous to the tubercles

and

and vomicæ are ſometimes in a natural ſtate; more often indurated. The pulmonary arteries and veins, as they approach the larger vomicæ, are ſuddenly contracted and obſtructed, ſo that they have little or no communication with thoſe cavities. This contraction does not take place in the vicinity of vomicæ under an inch in diameter. In ſome caſes, theſe morbid changes are very extenſive; and in other caſes, they are limited to particular parts of the lungs only. In the latter inſtance, the ſuperior and poſterior parts of thoſe organs are alone diſeaſed; and in the former, the ſame parts are principally affected. The lungs of the left ſide are more commonly diſeaſed than thoſe of the right *.

Phthisis a Materia Calculosa. This ſpecies is characteriſed by a ſhort cough, unattended with expectoration; ſhort, frequent, and difficult breathing, which is neither relieved nor aggravated by poſture; pain in the thorax; and ſometimes exceſſive diſcharge of blood from the lungs. It is peculiar to perſons above thirty years of age; while the phthiſis a tuberculis occurs moſt frequently before that period. The progreſs of this ſpecies is not

* The above deſcription of the appearances on diſſection is borrowed from Stark's Works, p. 26, et ſeq.; and Bailie's Morbid Anatomy, p. 46.

not ſo rapid as that of the former. The patient generally dies during a fit of breathleſsneſs.

The appearances on diſſection exhibit earthy concretions, formed throughout the ſubſtance of the lungs; and ſeated either in the extreme branches of the bronchia, or in the cells connected therewith.

Phthisis a Vomica. This ſpecies is generally preceded by pneumonia, or ſome accidental injury of the lungs. The expectoration, from the beginning, is purulent, and in conſiderable quantity; and the cough is trifling. The breathing is commonly frequent and ſhort; and inability to lie on one or other ſide is experienced. The progreſs of the diſeaſe is commonly very rapid.

Appearances on diſſection ſhow extenſive abſceſſes in the lungs, independent of tubercles. Theſe abſceſſes, called Vomicæ, (as well as thoſe connected with tubercles) are ſeated ſometimes within the ſubſtance of the lungs, and ſometimes on the external ſurface; in which caſe an adheſion is generally found between the affected part and the pleura. The death of the patient, in this ſpecies, is commonly very ſudden; and is immediately occaſioned by the burſting of the abſceſs.

CASES

CASES of PHTHISIS PULMONALIS.

PHTHISIS a TUBERCULIS.

CASE I. (XXII. 15.)

A STRUMPET, aged about twenty years, had been affected for many years with a ſlow fever, a cough, an ill conditioned expectoration, and emaciation of the whole body. She complained of pain in the left ſide of the thorax; and when ſhe lay on that ſide was troubled with difficulty of breathing. To theſe ſymptoms a copious ſpitting of blood ſupervened. This was checked: but two days after, while a violent ſouth wind prevailed, in which ſtate of the air thoſe who are affected with a diſorder of that kind generally die, ſhe expired.

Appearances on Diſſection.

THORAX. The right lobe of the lungs adhered very ſlightly to the ribs. In the ſubſtance of both lobes a number of hard tubercles, of a whitiſh colour, and reſembling glandular bodies, were obſerved. The ſuperior part of both lobes was alſo affected with other diſorders. For in the right lobe, towards the ſternum, a large hollow ulcer, containing purulent matter, was ſeen; and the left, towards the ſide, contained a hard ſubſtance,

equal in ſize to a large pear, reſembling in ſome meaſure the ſubſtance of the pancreas when indurated. In the middle of this body there was a ſmall ulcer full of pus. In the pericardium there was little ſerum. In the left ventricle of the heart a ſmall polypous concretion was found; and the right contained a polypus of a moderate ſize, the greater part of which was inſerted into the neighbouring auricle.

Case II. (xxii. 14.)

A musician, middle aged, who had three years before been affected with ſpitting of blood, had afterwards been troubled with cough, attended with the expectoration of the matter ſtyled defluxion. After many months had elapſed, the ſpitting of blood returned; and afterwards it again took place, and left behind it the expectoration of a great quantity of thick matter of a very bad appearance. He could lie eaſily on either ſide; and had no pain in the thorax. His cough however was troubleſome during the night, and eſpecially after ſupper. His breathing was difficult, particularly after motion, even of the ſlighteſt kind. Along with theſe ſymptoms, he had great thirſt and oppreſſion at the ſtomach after taking food. For ſome weeks before his death he had frequent nocturnal ſweats. Although it had been uſual for

his feet to be ſometimes ſwelled, and afterwards to ſubſide entirely; yet during the latter days of his exiſtence they no longer ſubſided. Diarrhœa, by which much ſerous matter was diſcharged, having ſupervened, he died as he was beginning to dreſs himſelf in order to riſe.

Appearances on Diſſection.

THORAX. The lungs were filled with many tubercles. The ſuperior lobule of the left lobe, at the upper part towards the ſternum, was externally very much indurated; and contained internally a pretty large ulcer, in which ſanious matter like a poultice was found. In the right cavity of the thorax almoſt half a pound of ſerous fluid was ſeen; and in the pericardium there was the ſame quantity. The ſerum in that latter part having been expoſed to the fire, completely diſappeared, leaving only a pellicle at the bottom of the veſſel.

CASE III. (XXII. 18.)

AN unmarried woman became affected with a fever, ſaid to be in conſequence of a fright. The fever was attended with a pain in her breaſt. The parotides, and almoſt all the glands of the neck, were ſwelled. She died.

Appearances on Diſſection.

ABDOMEN. The abdomen contained a ſmall quantity

quantity of limpid watery fluid. The omentum was connected with the mefentery and peritoneum by a kind of fmall ligaments. The furfaces of the peritoneum, the omentum, the mefentery, the inteftines, the uterus, the gall-bladder, and the urinary bladder, were unequal; in conſequence of protuberating bodies which lay here and there at a diſtance from each other, and were of various ſhapes and ſizes. In the upper part of the omentum they were exceedingly ſmall; in the inferior part they were very large and numerous, and lay quite contiguous to each other.

Thorax. In the left lobe of the lungs, not only was there an ulcer containing ſanious ichor, but alſo ſubſtances, ſimilar to thoſe which were found in the meſentery and in the other parts of the belly, appeared. Some of theſe bodies contained pus; ſome a matter almoſt like a poultice in its conſiſtence; while ſome were ſo ſolid, that they reſembled natural conglobate glands.

Case IV. (xxii. 24.)

A physician, middle aged, who had long had a cachectic appearance in his face, and had for ſome time been affected with difficulty of breathing and hoarſeneſs of voice, at length began to ſpit up a variouſly coloured matter. Along with this matter he one day coughed up a ſmall curved

bone, (but not very minute) which was ſmooth on the concave part, and rough on the convex. After this he was pretty frequently affected with a ſenſe of ſuffocation. At length one night, after having ſaid, before he went to bed, that he felt himſelf better, he was found dead. His death took place without being perceived by a perſon who lay by him for the purpoſe of taking care of him.

Appearances on Diſſection.

THORAX. In the lungs, both externally and internally, a number of veſicles, filled with white pus, of various ſizes, the largeſt not exceeding that of a grape, was obſerved. The pericardium contained a conſiderable quantity of turbid fluid. In the heart one very ſmall polypous concretion was found. The other parts within the thorax could not be examined leiſurely, as the body was opened without permiſſion from the relations.

CASE V. (XXVI. 29.)

A WOMAN, who had been for a long time thought to be conſumptive, was found to have died ſuddenly.

Appearances on Diſſection.

THORAX. In the left cavity of the thorax the correſponding lobe of the lungs contained three or four tubercles full of pus. In the right cavity the

the lungs were found; but coagulated blood, to the quantity of four pounds, was found extravaſated. This blood had been effuſed from the trunk of the vena azygos. That veſſel, although it had collapſed in conſequence of the effuſion, was ſtill ſo large, that it might be compared to the vena cava. The dilated portion was about the length of a ſpan, and in its middle, an open foramen of the form of an elipſis was perceived. Through this foramen the extravaſated blood had paſſed.

Phthisis a Materia Calculosa.

Case I. (xv. 25.

A woman affected with a very ſlight ſcabies, and conſiderable waſting of fleſh, was troubled with a ſhort cough, which was never attended with a diſcharge of thick expectoration, but always with a difficulty of breathing. This latter complaint was neither increaſed nor diminiſhed by poſture, as it continued the ſame whether ſhe lay on her back or on either ſide. When her neck was raiſed, indeed, ſhe breathed a little more eaſily; but then ſhe felt the ſenſation of a weight extending from the fauces into the cavity of the thorax, and rendering the fauces narrow. With theſe ſymptoms ſhe died.

Appearances

Appearances on Diſſection.

Thorax. The lungs were as it were tartarizated; for wherever they were cut into, the knife made the ſame raſping kind of noiſe as if one had cut into ſandy concretions.

Case II. (lxviii. 12.)

A young gentleman, aged fifteen years, of a good complexion, who had been healthy from his infancy, having been very ſeverely chided, and, as he was naturally thoughtful, having been much affected thereby, continued for the ſucceeding three days almoſt in a ſtate of ſtupor. On the third month after this, he begun to obſerve ſmall glands on his neck, which at firſt increaſed in ſize gradually; but, in a ſhort time the increaſe of the diſeaſe became ſo rapid, that beſides the ſwelling of the ſalivary and axillary glands, prominent bodies of the ſize of a pigeon's egg, reſembling ſtrumous glands, were felt on the back, the breaſt, and more eſpecially about the clavicles. Tumours of the ſame kind were ſoon after felt on the integuments, and alſo within the cavity of the abdomen. All theſe tumours were indolent, except one lying on the pectoral muſcle, which was three inches in length, livid in its colour, and ſomewhat painful to the touch. Thoſe within the belly, too, particularly on the left ſide, where there was a great degree

degree of tenſion, along with reſiſtance when preſſed, were painful. Not long after the beginning of the diſeaſe, an acute pain was felt ſometimes in the right knee and leg, and ſometimes in the left. From that period he was always unwell, being affected with ſymptomatic and irregular feveriſh attacks, with watchings, and with progreſſive emaciation. He was nevertheleſs lively and cheerful to the very laſt. His appetite for food never diminiſhed, but on the contrary was very keen, eſpecially in the latter days of his life. Although he felt a certain uneaſineſs about his throat, proceeding from mucus, which was readily hawked up by a ſlight cough, he never had any difficulty of breathing; which, conſidering the appearances after death, is very ſurpriſing. Many external and internal remedies were employed from the very beginning, and more eſpecially during the progreſs of the diſeaſe, when the moſt active medicines were preſcribed by the moſt experienced practitioners. But, notwithſtanding every means, the bulk of the tumours increaſed, and the diſeaſe was ſo rapid in its courſe, that, although it had only commenced in December, the death of the patient took place towards the end of May.

Appearances on Diſſection.

EXTERNALLY. The integuments of the neck, breaſt, and abdomen, being cut into, the external tumours were found to be ſeated in the adipoſe membrane,

membrane, which in thoſe places was cloſely connected by the under-lying muſcles. All theſe tumours were filled with a whitiſh matter, partly of a fluid, but chiefly of a ſolid and ſebaceous conſiſtence. Some of the moſt prominent, as thoſe adhering to the pectoral muſcles, which formed with the axillary glands one continued body, diſcharged when cut into a yellowiſh and ſanious fluid.

Abdomen. The whole omentum appeared to be beſet here and there with ſmall hard bodies, filled with the whitiſh matter above mentioned. The liver, the ſpleen, and the kidneys were themſelves in a natural ſtate; but the following appearances about each of theſe organs were obſerved: The peritoneum was ſtrongly connected to the right ſide of the liver. It, then, after having in ſeveral places formed as it were one and the ſame ſubſtance with the contiguous muſcles, projected outwards in the form of a body of the ſize of a hen's egg, filled with the matter already mentioned. This body was connected with the urinary bladder. Near the ſpleen, the left part of the meſocolon formed a ſwelling, which conſiſted of a congeries of tumours reſembling pigeons eggs. Theſe tumours were filled with the ſame matter obſerved in the others. The pancreas was full of the ſame tumours, and ſimilar ſwellings were ſeen ſcattered up and down through the meſentery. The adipoſe membrane of the kidneys was mon-

ſtrouſly thickened, being on the part placed towards the vertebræ two inches, and on the oppoſite part five inches thick. It was every where diſtended with the matter ſo often mentioned. The left kidney, together with a hard line which interſected the matter, weighed thirty-ſix ounces. The inteſtines were by no means free from diſeaſe: For ſmall bodies of the ſame nature with thoſe already ſeen, were obſerved on the adipoſe appendages of the colon, and on the ligamentous bands which paſs through that inteſtine. The glands of Peyerus, in the ſmall inteſtines, in ſome places, were of the figure and ſize of a lupin. One of theſe glands, much larger than the reſt, was inflamed, and contained putrid fluid.

Thorax. The mediaſtinum was in the middle thickly beſet with the bodies above mentioned, and one of theſe of the ſize of a ſmall hen's egg, not only lay contiguous to, but alſo compreſſed the trunk of the aſpera arteria. The lungs were internally ſound, but on their external ſurface, a number of hard and ſtony globules of the ſize of barley-corns, were implanted. The ſame ſurface was on the back part, hollowed out on both ſides, but particularly on the left, in conſequence of tumors of a large ſize which had formed on the adjoining pleura. Some of theſe tumors were ſituated near the dorſal vertebræ; and others were ſo diſpoſed that one lay on each rib regularly

from the lower part to the upper. The heart was in a natural ſtate, except that the external ſurface of the right auricle was completely granulated, as it were from little bodies of the ſame kind.

Case III. (xlviii. 38.)

An old woman had her right leg bitten by a dog. This was ſucceeded by great thirſt, inteſtinal flux, and ſlight fever. After ſeveral days the thirſt abated; but the other ſymptoms continued. She was then affected with vomiting, by which ſome worms of the lumbricus kind were thrown up. The vomiting finally ceaſing, ſhe became more and more exhauſted, and expired. In this patient, the pulſe had never been ſtrong, but had ſometimes been liable to intermiſſions. The woman had alſo been ſubject to cough, which however was ſlight.

Appearances on Diſſection.

Abdomen. The ſtomach appeared ſomewhat diſtended with air; and being naturally large, it extended ſo low that the portion of the colon which lies next it, was ſituated below the navel. The whole of that inteſtine, except its beginning, which together with the cæcum was turgid with air, was ſo much contracted that it reſembled one of the ſmall inteſtines. The duodenum, on the

contrary, was much larger than uſual, and paſſed downwards on the right ſide over a very long tract of vertebræ. The other ſmall inteſtines were of a dirty and ~~~ colour. The meſenteric glands of a moderate ſize, were diſtinctly perceived under a ſmall quantity of fat. The liver was large. Two furrows, as if made by a deep impreſſion of the fingers were perceived on the ſuperior part of its convex ſurface, from whence they deſcended in a parallel direction for a conſiderable length on the fore part. The ſpleen was thicker than uſual; it was ſomewhat rough on the gibbous ſurface, in conſequence of certain granules as it were; internally it was of a pale colour. The uterus lay towards the left ſide. Its whole internal ſurface was rough, but was not ulcerated; although that of the fundus, but not that of the cervix, was covered with black blood. The parieties of the os tincæ were ſomewhat thickened.

THORAX. The lungs were diſtended with air. Many of the bronchial glands about and within them were enlarged, and contained a tartareous matter. Both ventricles of the heart were filled with polypous concretions of a yellow white colour, placed amidſt ſome black blood. Some of theſe concretions were thick, and not eaſily torn. The valvulæ mitrales at the lower part, and eſpecially at that part next the aorta, were compoſed

of a compact ſubſtance, which was internally of a white colour. None of the valves of that artery were perfectly free from incipient oſſifications. One in particular on the ſurface, which was turned towards the ſide of the artery was completely bony, rough, and unequal, in conſequence of particles really oſſeous, in ſome parts lying upon each other, that projected like grains of ſand. On the other ſurface, this valve degenerated into a fleſhy excreſcence of a larger ſize than itſelf.

Head. Air bubbles were obſerved in the veſſels of the pia mater. A ſmall quantity of fluid was found under the ſame membrane and within the ventricles. The choroid plexuſes were not pale.

Phthisis a Vomica.

Case I. (xxii. 16.)

An unmarried woman, aged twenty-four years, after having been affected with ſpitting of blood, was troubled with a cough. She expectorated a catarrhous matter, which at laſt reſembled ſanies. She was feveriſh, and complained of pain in the thorax, eſpecially in the left ſide, on which ſhe could not lie. Her whole body was emaciated, except her feet which were both conſiderably ſwelled. The

The right foot was affected with eryſipelas for ſome days before death.

Appearances on Diſſection.

Thorax. The left cavity of the thorax was filled with a ſerous fluid, together with ſmall portions of coagulated blood, adhering in different places to the pleura, and to the lower edge of the lungs. The pleura was as red as if it were inflamed, and the contained portion of the lungs had become indurated as inflamed lungs generally are. The right cavity of the thorax contained little ſerum, and in it the pleura was found; but the lobe at that part next the clavicle was ſomewhat hard, and concealed an ulcer in the middle of the hardened portion. Scarcely any veſtige of fluid could be traced in the pericardium. The ventricles of the heart were completely filled with coagulated blood.

CAUSES of Phthisis Pulmonalis.

Predisponent Cause. Perſons of a ſanguine, or of a ſanguineo-melancholic temperament, as it is called, who have a very fine ſkin, with the veins ſhining through it, a roſy complexion, ſoft fleſh, thick upper lip, a long neck, narrow cheſt, prominent ſhoulders, and are altogether of a delicate make, and of much ſenſibility and irritability; thoſe

thoſe the growth of whoſe body had been at the age of puberty remarkably rapid; thoſe who during the early periods of their life had been affected with ſcrophula; and thoſe born of ſcrophulous and of phthiſical parents, are chiefly prediſpoſed to the firſt and third ſpecies of phthiſis.

It appears, therefore, that a particular conſtruction of the body, or of the ſyſtem, is the prediſponent cauſe of the diſeaſe in thoſe ſpecies. The ſtate of the ſyſtem on which the ſecond ſpecies depends, is exceedingly obſcure. It is probably ſomewhat analogous to that from whence preternatural oſſification proceeds.

Exciting Causes. Hæmoptyſis, Catarrh, Aſthma, Pneumonia; Wounds and Injuries from external violence affecting the Lungs; the Introduction of Extraneous Matters into thoſe Organs; Tubercles of the Lungs; Contagion; Exceſs of Oxygen in the Blood; General Debility; the Repulſion of Cutaneous Eruptions; and the Metaſtaſis of the matter of Syphilis and Scurvy, have been regarded as the exciting cauſes of the firſt and third ſpecies of phthiſis pulmonalis.

Hæmoptyſis, *Catarrh*, *Aſthma*, and *Pneumonia*, are only productive of phthiſis pulmonalis where there is a prediſpoſition to that diſeaſe. The ſame obſervations apply to wounds and external injuries communicated to the lungs: for Dr. Ruſh mentions,

tions, that out of twenty-four Britiſh ſoldiers admitted into the hoſpitals, during the campaign of 1776, with wounds in their lungs, twenty-three recovered *.

The Introduction of Extraneous Matters into the Lungs. This happens in conſequence of certain occupations in life; as, the grinding of corn, flax-dreſſing, &c. But it is not probable that under ſuch circumſtances phthiſis pulmonalis is produced, unleſs there be a ſtrong prediſpoſition to the diſeaſe. Thus, millers are ſubject to a dry cough, which often continues for many years without terminating in phthiſis.

Tubercles in the Lungs. The nature of theſe tubercles has been variouſly deſcribed by different authors. By ſome they have been regarded as enlarged glands †; and by others, as effuſions of mucus ‡. From the obſervations of Dr. Stark and of Dr. Baillie §, it appears, that tubercles are ſeated in the cellular ſtructure which connects the air cells of the lungs together; and conſequently, it is inferred by Dr. Baillie, they cannot be glandular, as there are no glands in that membrane. Their circumſcribed form, and their ſtructure, ſeem

* Vide Dr. Ruſh's Medical Enquires, vol. ii. p. 97.

† Vide Dr. Cullen's Firſt Lines, par. 876; and Dr. M'Bride's Works, quarto edition, p. 397.

‡ Vide Dr. Ruſh's Enquiries, vol. ii. p. 99.

§ See Baillie's Morbid Anatomy, p. 46.

ſeem to overturn the opinion of their being effuſions of mucus. It has been imagined that tubercles are inorganiſed bodies; but the following circumſtances contradict this. *Firſt*, The progreſſive increaſe in their ſize, which is clearly marked; *Secondly*, The converſion of their contents into pus; and *Thirdly*, Their being covered with a thin capſule. Their preciſe nature ſtill therefore remains to be determined. The ſuppoſition of their being indurated glands was certainly the moſt natural one; ſeeing that they are generally accompanied with glandular ſwellings in other parts of the body, and that they occur only in perſons born of ſcrophulous and phthiſical parents.

Contagion. It is ſtill diſputed among practitioners whether phthiſis pulmonalis be ever communicated by contagion. That it is not a frequent cauſe of the diſeaſe, is evinced by daily experience: but it might be raſh to aſſert that it can never produce it, eſpecially as there are ſome ſtriking facts adduced to prove that it ſometimes acts as an exciting cauſe. Thus Dr. Ruſh relates, that "the late Dr. Beardſley of Connecticut informed him, that he had known ſeveral black ſlaves affected by a conſumption, which had previouſly ſwept away ſeveral of the white members of the family to which they belonged *."

Exceſs

* See Dr. Ruſh's Medical Enquiries, vol. ii. p. 101.

Excefs of Oxygen in the Blood. Dr. Beddoes * has endeavoured to ſhew, that in certain caſes of phthiſis the blood is hyper-oxygenated. This over proportion of oxygen in the blood, however, though proved, muſt neceſſarily proceed from ſome deranged ſtructure of the lungs, or of the ſyſtem. In that caſe it ſhould be regarded as the effect of the exciting cauſe, and not as the exciting cauſe itſelf: a diſtinction neceſſary not only for accuracy of ideas, but alſo probably for practical purpoſes †.

General Debility. Dr. Ruſh has alleged, that general debility of the whole ſyſtem is the exciting cauſe of the firſt ſpecies of phthiſis pulmonalis; and that ſome of the circumſtances generally enumerated as ſuch, as hæmoptyſis, tubercles, &c. are the effects, and not the cauſes, of the diſeaſe; while others, as violent paſſions of the mind, exceſſive evacuations, cold and damp air, &c. act only by producing debility. "Should it be aſked," he obſerves, "Why does general debi-

* Obſervations on the Nature and Cure of Calculus, Sea Scurvy, Catarrh, Fever, &c. by Thomas Beddoes, M. D. page 136, et ſeq.

† Dr. Beddoes has propoſed two theories reſpecting the cauſe of conſumption. By the one of which, he conſiders the diſeaſed ſtate of the lungs to be the effect of the increaſed quantity of oxygen combined with the blood; and it is that theory which is conſidered here. The ſecond theory is noticed in another place.

lity terminate by a diſorder in the lungs rather than any other part of the body? I anſwer, That it ſeems to be a law of the ſyſtem, that general debility ſhould always produce as a ſymptom ſome local diſeaſe *." He farther obſerves, "It would ſeem as if the debility in the caſes of conſumption is ſeated chiefly in the blood-veſſels; while that debility which terminates in diſeaſes of the ſtomach and bowels is confined chiefly to the nerves; and that the local affections of the brain ariſe from a debility invading alike the nervous and arterial ſyſtems." It is not eaſy to comprehend, notwithſtanding the obſervations of the ingenious author of this opinion, how debility ſhould produce an affection of the lungs without the intervention of ſome exciting cauſe. The ſymptoms of general debility which he enumerates, as preceding phthiſis pulmonalis, viz. "quick pulſe, eſpecially towards evening, heat and burning in the palms of the hands, faintneſs, headach, ſickneſs at ſtomach, and occaſional diarrhœa," certainly do ſometimes take place before any complaint in the breaſt; but in by far the greateſt number of caſes, occur only after the affection of the lungs has commenced.

It is well known that phthiſis ſometimes follows the repulſion of cutaneous eruptions, as ſmall pox, meaſles

* Vide Ruſh, loco citato, page 105.

meaſles, &c. and it has been alleged that it alſo follows in ſome caſes ſyphilis and ſcurvy. This has been accounted for in different ways. Thus Dr Cullen ſuppoſes that thoſe diſeaſes produce an acrimonious ſtate of the fluids, which occaſions tubercles; and Monſ. Portal, as well as Dr Ryan, think that they produce a local inflammatory affection of the lungs, which terminates in ulcerations without tubercles.

There is no inconſiſtency in ſuppoſing that thoſe diſeaſes, in different caſes produce both effects: for there is no doubt that tubercles in an incipient ſtate ſometimes exiſt for a conſiderable length of time, without being accompanied with any morbid ſymptom. In ſuch caſes, any circumſtance which can excite inflammation of the lungs muſt produce ſuch a change in the ſtate of the tubercles as ſhall render them exciting cauſes of phthiſis. In other caſes, the effect of theſe diſeaſes may be ſimply inflammation of the lungs, which terminates in ſuppuration.

The cauſe which induces the ſecond ſpecies of phthiſis pulmonalis ſeems to be a certain diſpoſition in the blood-veſſels of the lungs, to form or to depoſite calcareous matter; but the nature of this diſpoſition is too much involved in obſcurity to be inveſtigated here.

On the whole, there appears to be three claſſes of exciting cauſes of phthiſis pulmonalis, corre-

ſponding to the three ſpecies of the diſeaſe. The firſt comprehends all thoſe circumſtances which tend to the production, or perhaps, to ſpeak more accurately, to the inflammation of tubercles; the ſecond conſiſts of a diſpoſition in the blood-veſſels of the lungs to form or depoſite calcareous matter; and the third includes every circumſtance which prevents the healing of ulcers formed accidentally in the lungs.

Proximate Cause. It has been generally imagined that the proximate cauſe of phthiſis pulmonalis is ulceration of the lungs; and this ſuppoſition has been thought to be founded upon the appearances on diſſection *. It has however been already ſtated, that, in ſome caſes of the diſeaſe, there are no ulcerations in the lungs; as, for example, where there is a depoſition of calcareous earth.

Another opinion has been advanced on this ſubject, by Dr. Beddoes; viz. that the ſtructure of the lungs is ſo altered as to tranſmit a more than ordinary portion of oxygen to the blood †. In ſupport of this hypotheſis, Dr. Beddoes has endeavoured to ſhow (as has been already mentioned), that

* Vide, Home's Princip. p. 147—Cullen's Firſt Lines, par. 862.

† Beddoes's Obſervations on the Nature and Cure of Calculus, Sea Scurvy, Conſumption, &c. p. 135.

that the blood in phthifical patients is hyper-oxygenated; and has adduced ſeveral caſes, to prove that the means moſt conducive to the cure of conſumption are thoſe by which the ſupply of oxygen to the ſyſtem is much diminiſhed. His opinion originated from an obſervation, that nature in particular caſes ſuſpends the progreſs of phthiſis pulmonalis, by the very means, which are calculated, he thinks, to diminiſh the ſupply of oxygen, viz. in caſes of pregnancy. As the fœtus, he remarks, receives from the mother that proportion of oxygen which is neceſſary to its exiſtence, while at the ſame time there is no apparent proviſion for an extraordinary ſupply of it to the mother; it follows, that, during pregnancy, the ſyſtem of the woman muſt receive a leſs quantity of oxygen than uſual.

Although this ingenious hypotheſis be exceedingly plauſible, it is by no means ſatisfactory. That pregnancy does not always ſuſpend phthiſis pulmonalis muſt be allowed by every practitioner; and that it generally accelerates inſtead of retarding the progreſs of the diſeaſe, has been already alledged by the author of theſe remarks. Beſides, the ſuppoſition of a larger quantity of oxygen than uſual being tranſmitted into the blood, by lungs ſo much diſeaſed as to be incapable in general of admitting above one fourth of the ordinary quantity of air, is inconſiſtent with the common opinion

reſpecting

reſpecting the functions of the lungs, the opinion which Dr. Beddoes himſelf adopts. For if the lungs, in a healthy ſtate, be deſigned to combine with the blood the oxygen contained in the atmoſpheric air received into thoſe organs, it is ſurely unphiloſophical to imagine that a diſeaſed ſtate, which prevents not only the admiſſion of the uſual quantity of atmoſpheric air into the lungs, but alſo the free tranſmiſſion of the blood through them, ſhould render them capable of combining an increaſed quantity of oxygen.

An hypotheſis of a different nature, founded too upon chemical principles has been ſuggeſted by Dr. Reid, viz. That the diſeaſed ſtate of the lungs prevents the expulſion, during reſpiration, of the phlogiſton and lymph generally thrown off by that operation *. Changing the terms employed by Dr. Reid for thoſe now uſed, his hypotheſis ſeems to be, That the diſeaſed ſtate of the lungs prevents the admiſſion of oxygen; which is directly oppoſite to Dr. Beddoes' opinion. An objection, however, immediately occurs againſt this opinion, which is, That, were it juſt, phthiſical perſons ſhould be always cold, in the ſame manner as the blue boy, mentioned by Dr. Sandyford, the right ventricle of whoſe heart opened into the aorta,

* Vide, An Eſſay on the Nature and Cure of Phthiſis Pulmonalis, by T. Reid, M. D. firſt edit. p. 58. et ſeq.

ta, ſo that a ſmall quantity of blood only paſſed through the lungs; whereas, ſuch patients are, on the contrary, always affected with much heat.

What then is to be regarded as the proximate cauſe of phthiſis pulmonalis? Since the deranged ſtructure of the lungs produced by the exciting cauſes of the diſeaſe neither prevents the admiſſion of oxygen, nor promotes an increaſed ſupply of it, at leaſt in ſo far as has been hitherto proved; may it not be probable that it acts by ſubtracting the nutritious part of the blood?

REMARKS ON THE CASES OF PHTHISIS PULMONALIS.

Caſes of Phthiſis a Tuberculis. In the firſt caſe, the reſemblance between the tubercles and glandular bodies is clearly marked by Morgagni.

The third caſe affords an example of the complication of phthiſis and tabes meſenterica. The ſimilarity noticed between the tubercles in the lungs, and the protuberating bodies on the ſurface of the peritoneum, omentum, inteſtines, &c. and the ſimilitude of thoſe bodies to glands, are ſtrong circumſtances in favour of the opinion that tubercles are of a glandular nature.

The fourth caſe is remarkable from the oſſifica-

tion which had been coughed up from the lungs. It is unfortunate that the hurried manner in which the body was examined prevented the ſeat of the bone from being diſcovered, and alſo rendered it uncertain whether there were in the habit a diſpoſition to form oſſific matter.

In the fifth caſe, the death of the patient ſeems to have been occaſioned by the ſudden rupture of the vena azygos, which was quite an accidental circumſtance.

Caſes of Phthiſis a Materia Calculoſa. The firſt caſe was ſo well marked, that, before the death of the patient took place, Malpighius foretold the appearances in his lungs.

In the ſecond caſe, there were evident ſcrophulous tumours throughout the whole body; yet no tubercles appeared on the lungs, but on the contrary hard ſtony concretions. This ſhews that, although tubercles do not exiſt without ſcrophula, they are not the neceſſary conſequences of that morbid ſtate. The oſſifications that appeared within the heart, in the third caſe, ſhew a coincidence between the diſpoſition in the veſſels to form bone, and to depoſite calculous concretions.

§ 2.

§ 2. TABES MESENTERICA.

THIS diſeaſe begins with irregularity in the ſtate of the bowels, ſometimes obſtinate coſtiveneſs taking place, and at other times, looſe, ſlimy, unnatural ſtools being diſcharged. The appetite for food is very irregular; for ſometimes there is a loathing at all kinds of food, and at other times a voracious hunger. The belly is generally ſwelled and hard; and where the diſeaſe occurs in children, it is always ſo. In ſuch caſes, too, hard knotty bodies often can be felt through the teguments of the abdomen. The whole body is by degrees emaciated. The ſkin is generally dry and hot. The mouth is parched, and conſtant thirſt attends. The uneaſineſs is generally aggravated after taking food. Hectic fever, at firſt very irregular, and by degrees diſtinctly marked, at laſt ſupervenes. A remarkable appearance in the urine has been noticed, viz. that it is thick, and ſometimes chylous *.

Tabes meſenterica moſt frequently attacks children; but as the ſucceeding caſe ſhows, it alſo occurs

* Vide Juncker's Conſpectus, pag. 361; from whoſe deſcription of this diſeaſe the above hiſtory is principally borrowed.

curs in adults. It is ſometimes complicated with phthiſis pulmonalis.

The appearances on diſſection prove that the ſeat of the diſeaſe is in the glands of the meſentery. Thoſe glands are found enlarged: they are ſometimes ſo much indurated, as to reſemble ſcirrhi; ſometimes, on the contrary, they are quite ſoft and flabby; and ſometimes they contain pus, mixed with a white ſoft curdly matter *.

CASE OF TABES MESENTERICA.

CASE. (XXVII. 16.)

A BEGGAR, aged fifty years, who had formerly been a wool-comber, was found dead. He had been hectic for ſome time, and had been ſo much diſtreſſed with heat, that although it was the coldeſt ſeaſon of the year, he had been accuſtomed to lie naked upon ſome ſtraw in a hut, and in this ſituation he was found.

Appearances on Diſſection.

ABDOMEN. A larger than ordinary proportion of fluid was obſerved in the cavity of the belly. The ſtomach was very much diſtended, and on the ſuperior part was covered by the omentum, which was

* Vide Baillie's Morbid Anatomy, pag. 134.

was in a great meaſure drawn upwards. The ſtomach contained a conſiderable quantity of air, and a ſmall proportion of urine, with the colour of which the internal ſurface was tinged. The meſenteric glands, both in the center of the meſentery where they were collected in the form of a double cluſter of grapes of a moderate ſize, and alſo in other places here and there, where they were perfectly diſtinct, were much larger than uſual, and ſomewhat indurated. Although the liver was of a moderate ſize, the ſpleen was very ſmall; but the ſplenic artery was of a larger ſize than in proportion to that of the ſpleen. The other abdominal viſcera were in a natural ſtate.

Thorax. The heart was not ſmall, but was flabby. A pretty large bony ſcale appeared externally nearly in the middle of its poſterior ſurface, and a ſmaller ſcale of the ſame kind was ſeen likewiſe externally on the right auricle. The internal ſurface of the aorta, behind the ſemilunar valves, was marked with whitiſh ſpots.

CAUSES of Tabes Mesenterica.

Predisponent Cause. It has been generally imagined, that a ſcrophulous habit of body is the neceſſary prediſponent cauſe of tabes menſenterica; and it muſt be confeſſed that the appearance

of the ordinary ſubjects of the diſeaſe, ſeems to confirm this opinion. Both Sauvages and Dr. Cullen, however, believe that the diſeaſe ſometimes occurs in thoſe who have never had any ſymptom whatever of ſcrophula *.

Exciting Causes. Bad diet and inattention to cleanlineſs, have been commonly regarded as the exciting cauſes of this diſeaſe. But it is not eaſy to underſtand the exact manner in which thoſe circumſtances can produce ſwelling, induration, or ſuppuration of the meſenteric glands.

Proximate Cause. The obſtruction of the meſenteric glands, by which a due ſupply of chyle is prevented, is obviouſly the proximate cauſe of tabes meſenterica.

Anomalous Cases of Tabes.

Case I. (xxix. 12.)

A woman, aged forty years, who had been accuſtomed to live chiefly upon ſalt victuals, and to drink plentifully of wine, had been for many years

* Vid. Sauvages Noſol. Med. tom. 2. p. 449; and Dr. Cullen's Firſt Lines, par. 1556.

years ſubject to pains of the ſtomach. Impaired appetite for food, nauſea, and ſoon after, repeated vomiting of blood, together with conſtant fever, reſtleſsneſs, and thirſt, ſupervened to theſe pains. Although no hardneſs could be perceived in the belly, yet a certain uneaſy ſenſation was from time to time felt in the region of the ſtomach during the abſence of the ſevere pain, even though no preſſure were made. She complained alſo of pain in her loins; but it was only when ſhe had been working more than uſual, or had been carrying ſome burden. Along with all thoſe complaints, ſhe was ſometimes affected with a very ſevere pain in the head. Whenever theſe ſymptoms became violent, more eſpecially the ſtomach complaints, ſhe received conſiderable relief from blood-letting. She ſeemed, too, to derive much benefit from drinks, in which a piece of bread only had been boiled. She appeared alſo, more than once, to have become convaleſcent from the daily uſe of milk diet, and her ſpirits were kept up by the regular appearance of the menſes, which flowed at ſtated periods, till the time of her death.

At laſt a hard tumor appeared on each ſide above the clavicles, at that part where the external jugular vein paſſes. Theſe tumors occaſioned conſiderable pain, and as they did not yield to any remedy, but on the contrary, increaſed daily, they

they rendered the reſpiration difficult. Along with thoſe ſymptoms, ſhe had conſtant fever, which, preceded by a ſlight chilly fit, increaſed always towards the evening. She complained of pain in her head; and the pain in her ſtomach was conſtant, but was not now attended with vomiting of blood. She was perpetually diſtreſſed with thirſt, and had a ſenſation of much bitterneſs in the mouth; from which organ, during the latter days of her life, a very fetid ſmell proceeded; but no pus was ever obſerved to be ſpit up. Under theſe circumſtances, ſhe dragged out a miſerable exiſtence, much longer than from the ſmall and feeble ſtate of her pulſe could have been expected. Her pulſe for the laſt fifteen days, during which time ſhe took nothing but a little broth and ſome wine, became ſmaller and more frequent. At length ſhe died.

Appearances on Diſſection.

EXTERNALLY. The carcaſe was very lean.

ABDOMEN. The omentum was rolled up towards the upper part of the abdominal cavity, in ſuch a manner, that the tranſverſe arch of the colon, which commonly lies under the ſtomach, appeared immediately under the umbilicus. It might have been forced into this ſituation partly by the ſtomach, as the left part of the fundus of that viſcus deſcended lower than uſual. The ſtomach externally, and particularly at one place to

a

a large extent, was of a livid colour. Its coats were thickened and indurated; except in certain parts, where they were ſo putrid that they were lacerated on touching them. Through theſe lacerations a very fetid cineritious matter, like a kind of poultice, which was contained within the ſtomach, was diſcharged. This fluid had burſt into the ſtomach from a tumor or abſceſs of the worſt kind, which had been ſituated on its poſterior ſurface: for at that place the ſtomach was to a great extent immoderately thick, ſwelling inwards; unequal in its ſurface; in a filthy, rotten, and gangrenous ſtate; and of the ſame colour as the above mentioned matter. The pylorus was ſound. All the inteſtines, the colon not excepted, were in a contracted ſtate; which was to be expected after ſo long continued loſs of appetite. The ſpleen, although ſound, was of a larger than ordinary ſize, and was internally of a pale colour. On the right ſide of the liver ſome ſcirrhoſities, of a white colour, and roundiſh form, like common ſized grapes, were obſerved. Theſe were diſpoſed over the ſurface in ſuch a manner, that they were in ſome degree concealed within the ſubſtance of that organ. In cutting through the liver, one of theſe tumors, completely buried within its ſurface, appeared. The gall-bladder contained a large quantity of very yellow bile, which had tinged the neighbouring parts. On the poſterior ſurface of the left kid-

ney there was an oblique line, of a conſiderable length, of a whitiſh colour, and of an apparently tendinous ſubſtance. This line penetrated to ſuch a depth that it reached the tubulæ in which the papillæ are received. It had very much the appearance of the cicatrix of a former ulcer; but no mark of this could be diſcovered, neither in the ſurrounding adipoſe membrane, nor in the abdominal muſcles. The uterus was ſmall, and ſituated very low; and inclined ſo much towards the right ſide, as to be greatly nearer that than the left ſide. The round ligament, too, was much ſhorter on the right ſide than on the left. The cervix uteri, and more eſpecially the os tincæ, were found nearly in the ſame ſtate as in virgins; the former having, internally, the oblique and prominent rugæ, which characteriſe it; and the latter having a narrow and round aperture. The hymen, though ſmall, was diſtinct, and exhibited no marks of laceration; but within the hymen, neither were the carunculæ myrtiformes obſerved, nor were the rugæ of the vagina diſtinctly marked. The ſkin too, at the lower part of the abdomen, being indented with whitiſh coloured pits, did not correſpond with the appearances of the cervix uteri and hymen. The ovaria were of a large ſize, conſidering the age of the woman and ſmallneſs of the uterus. Externally they were wrinkled: internally, the left contained ſome ſmall

empty

empty cells included within a thick white membrane; and the right had, within a cell not much larger than theſe, ſome black coloured half coagulated blood. The right Fallopian tube was pervious to the ovarium, but impervious towards the uterus: the left, on the contrary, was open only towards the uterus. A conſiderable quantity of fat was obſerved in the meſentery, and in the interſtices of the muſcles of the back and limbs; and a ſmall quantity alſo in the omentum. This was ſurpriſing in ſo lean a ſubject; but indeed it was a female one. The abdominal muſcles were of a very beautiful red colour. Some glands, greatly enlarged, lay hid beneath the yellow fat contained in the meſentery, which covered the lumbar vertebræ and the trunks of the large veſſels contiguous to them. Theſe glands adhered ſo cloſely to thoſe veſſels, as to be ſeparated with great difficulty. They were internally white, and not very hard; and they contained purulent ichor. The other glands throughout the meſentery were not enlarged. Near the ſtomach, however, one of the lymphatic glands was obſerved to be much thicker and harder than ordinary: it was of a dirty yellow colour. The whole of the pancreas had become thickened, and at the ſame time ſomewhat dry and hard; except in one part, which grew out into a white ſubſtance reſembling that of the thymus gland.

THORAX. The two loweſt jugular glands were of a white colour, and were enlarged to the ſize of two inches at leaſt. Theſe glands conſtituted the hard tumor on each ſide under the clavicles, mentioned in the hiſtory of the caſe. They were found to be conſiderably hard, although they contained a purulent ichor: part of this flowed out when the clavicles, under which, and on the contiguous part of the ſternum, they lay, were removed. The other jugular glands alſo were in the ſame ſtate, with reſpect to colour, hardneſs, and contents; but had not increaſed to ſo large a ſize. The axillary glands had undergone no change whatever. But thoſe glands placed at the firſt diviſion of the aſpera arteria, were of a white colour; and, from a ſmall ſize, had become not leſs than ordinary grapes. They were ſomewhat hardened too; and contained the ſame kind of purulent ichor ſeen in ſo many other glands. The aſpera arteria, however, at leaſt towards the throat, was ſound; as was alſo the œſophagus in its whole length. The lungs, which were turgid with air, were free from diſeaſe. A number of roundiſh tubercles, of a hard compact ſubſtance, and of a depreſſed figure, ſo numerous as to be almoſt contiguous to each other, beſet all the edges of the valvulæ mitrales. In one of the ſemilunar valves a ſmall ſcale, not however bony, was obſerved. In other reſpects the heart was ſound.

HEAD.

HEAD. The brain not only was not flabby, but even approached towards hardneſs: it was in a natural ſtate, except that a ſmall quantity of pellucid fluid was found in the lateral ventricles, and that the plexus choroides were pale. The pineal gland was ſomewhat more firm and globular, and of a whiter colour, than it uſually is.

CASE II. (XLVII. 4.)

AN unmarried woman, who had for many years had no menſtrual diſcharge, and who had been long troubled with ulcers in the legs, having become hectic, died.

Appearances on Diſſection.

ABDOMEN. A conſiderable quantity of effuſed fluid was found in the belly. On the internal ſurface of the uterus, a great number of protuberant apparently glandular bodies were obſerved; there were few, however, towards the fundus. The ovaria contained no veſicles, and conſiſted of a whitiſh ſubſtance ſimilar to that of the pancreas, except that it was of a ſofter conſiſtence.

THORAX. A quantity of effuſed fluid was found in the cheſt, as well as in the belly.

CASE III. (XLIX. 16.)

A MAN who was greatly emaciated, and was by

ſome deemed affected with phthiſis, was brought into the hoſpital of Padua, where he died.

Appearances on Diſſection.

Abdomen. All the viſcera were found.

Thorax. The lungs and other contents of the cheſt were in a natural ſtate.

Head. The dura mater was very much thickened, and the brain was very flabby. It was found, on examining the ſuperior part of the medulla ſpinalis, that the dura mater could not be ſo eaſily ſeparated as uſual; and that, in drawing it off from the contiguous membrane, much caution was neceſſary in order to prevent laceration.

The ſkin in this ſubject was very hard, as it commonly is in tabid bodies.

Case IV. (xlix. 18.)

An old man, who was very much emaciated, died, it was ſaid, in conſequence of the maraſmus incident to old age.

Appearances on Diſſection.

Abdomen. The meſenteric glands were not ſo ſmall as they generally are at that age. A great number of glands, of a large ſize, both with reſpect to thickneſs and to length, ſome of them being two or three inches long, were obſerved about the iliac veſſels from their origin quite down to the thighs. Theſe were placed in ſuch a manner, that

they ſeemed to cover the iliacs, like a continued chain; and preſſed upon them ſo much, that the parietes of thoſe veſſels appeared ſomewhat inflected and varicoſe. When cut into, theſe glands did not appear different from the natural ſtate of lymphatic glands. The ſpleen, though rather ſmall in its other dimenſions, was thicker than uſual, eſpecially about the middle. The membranous bands by which it is connected to the diaphragm were alſo thicker than common; and beſides, its coat was not only likewiſe thick, but was alſo, in the centre of its convex ſurface, indurated for a ſpace equal to a circle of two inches diameter, and in ſome part of that ſpace it had become oſſified. Internally, a trunk of the veſſel, alſo indurated, belonging to the ſubſtance of the ſpleen, appeared connected to the ſame part. The ſplenic artery, for the extent of ſome fingers breadth from its origin at the cœliac, was ſomewhat narrower than natural; but at the part where it begun to be contorted, as uſual, it became wider. The urinary bladder, which was ſo much diſtended with urine that it appeared above the pubis, had its coats thickened. When compreſſed by the hand, the contained urine was not eaſily diſcharged; nor was it poſſible by theſe means to force out the whole of it. This was probably occaſioned by the ſtate of the proſtate gland; for that body was enlarged, and protruded from the internal

internal orifice of the urethra into the cavity of the bladder. It was externally of a browniſh red colour. Within its ſubſtance, which was in other reſpects in a natural ſtate, granules of a blackiſh yellow colour, like tobacco, were ſeen in ſeveral places.

THORAX. The heart was completely deſtitute of fat; its ſurface was of a dirty yellow colour, and was not ſmooth. The valves of the aorta were very hard: within the internal ſurface of that veſſel itſelf, beyond the valves, large bony ſcales were obſerved. But in that part of the aorta ſituated in the belly, and in the iliacs continued from it, incipient oſſifications, or white ſpots, only were found.

The carotid arteries had a ſingular appearance; having aſcended one half of their height, they became contorted like a ſcrew, and immediately after returned to their original ſtraitneſs; and ſo obſtinate was that contortion, that, although the arteries were drawn out into a ſtraight line, they aſſumed their original form the inſtant they were left to themſelves.

CASE V. (LXV. 3.)

A MAN, aged forty-four years, having been at a diſtance from his own home, in a mountainous and uncultivated country, had taken, on account of

of a ſlight gonorrhœa, many mercurial medicines. Although theſe medicines were probably ill prepared, he could get no other in that country. While uſing thoſe remedies, his ſtomach was very often irritated, and vomiting frequently took place. From that period, he began to vomit almoſt every thing which he eat or drank; and if he did not vomit, he became very much diſtreſſed with a pain in his ſtomach, which he felt at all times in a ſlight degree; and alſo with hiccup. When he took food immediately after vomiting, he moſt generally retained it. He had a large diſcharge of thick ill-ſmelling ſaliva. His belly was coſtive; and when glyſters of milk were uſed, nothing was expelled but hard excrementitious lumps. Although the pulſe was not at firſt affected, yet there was a conſiderable emaciation of the body from the beginning. Many different medicines were employed, but in vain; for he at laſt died.

Appearances on Diſſection.

ABDOMEN. The pylorus of the ſtomach was very narrow and very hard. Near it there was a ſmall ulcer; on the other parts of the internal ſurface of the ſtomach ſeveral bodies like glands were ſcattered here and there.

CASE VI. (LXV. 5.)

AN old woman, who had been long affected with

with an obſtinate diarrhœa, attended with a great loſs of fleſh, became at laſt reduced to a ſtate of extreme weakneſs; and in this ſituation died.

Appearances on Diſſection.

Abdomen. Inſtead of the adiſpoſe membrane placed under the ſkin, which is very rarely wanting even in the moſt emaciated women, a thin membrane like net-work, ſcarcely retaining the ſmalleſt veſtige of fat in any part of it, was obſerved. In the belly neither was there any ill ſmell, nor could any remarkable appearance at firſt ſight be diſcovered, except that the bile in conſiderable quantity and of a deeper than ordinary colour, contained in the gall bladder (which was pretty large, and extended conſiderably below the liver) had tinged its contiguous parts more extenſively than common. Neither the ſmall inteſtines, nor the ſtomach, which was in a contracted ſtate, were in any degree diſeaſed. Some parts of the internal ſurface of the large inteſtines, eſpecially about the cœcum and colon near the valvula coli, were red from inflammation. The rectum was quite livid from previous inflammation, and on its internal ſurface it was in ſeveral places, eſpecially towards the inferior part, ſwelled out. On the ſwelling at the lower part, a ſpot was obſerved extending upwards the length of a finger's breadth. This ſpot was ſoft and prominent, appearing as if it were formed from ſome half coagulated

gulated blood placed under the internal coat of the inteſtine. Above this part, ſeveral bodies, either true lenticular glands, or of a ſimilar nature, of a reddiſh or rather brown colour, appeared diſperſed up and down. Some of the meſenteric glands, although of a ſound texture, ſeemed of a larger ſize than is common at that age. The trunk of the aorta was ſomewhat hard in ſeveral places, and on its internal ſurface was of a whittiſh colour, in conſequence of many incipient oſſifications. On the internal ſurface, too, the poſterior and lateral portions of the veſſel formed, by their junction, an angle inſtead of a curved line.

Case VII. (lxx. 5.)

A porter, aged fifty years, who had been greatly addicted to drinking, and accuſtomed to indulge in much eating, was affected, three months previous to his death, with a tertian fever. This man, not only had not been a valetudinarian, but had even been in perfect health, except, as was learned from his companions, that now and then he complained of a pain ſituated in the epigaſtric region, about the ſcorbiculus cordis. When the fever began to abate, he became ſubject to vomitings; which diſappearing for ſome time again, returned and continued to trouble him during the reſt of his life. He never vomited any thing but

his food; and when vomited it had never any bad ſmell or taſte. During the laſt month of his life, he could retain nothing on his ſtomach but muſcadine wine, which was given by way of cordial. In conſequence of this, he became hectic, and had a great waſting of fleſh. Every medicine, both internal and external, that was employed to check theſe vomitings, proved ineffectual. Among thoſe, quickſilver was uſed, to the quantity of three ounces, about a month before his death, when an obſtinate coſtiveneſs afforded reaſon to apprehend iliac paſſion. This medicine neither proved of any advantage, nor was afterwards ſeen during the operation of clyſters; but it was ſuppoſed by the attendants, to have been afterwards diſcharged along with the fæces, when the ſtricture of the bowels was removed. Under the ſymptoms above ſtated, he died, never having complained of any tumor or pain in the belly; his pulſe alſo having never been much affected, except only that it now and then intermitted.

Appearances on Diſſection.

External Appearances. The body was ſo exceedingly emaciated, that on the back of the hands, and on the upper part of the feet, the bones of the metacarpus and thoſe of the metatarſis could have been very well demonſtrated; and the eyes were, in conſequence of the deficiency of fat in the poſterior part of the ſocket, moſt aſtoniſhingly

aſtoniſhingly ſunk. From the lobe of the left ear, a ſlender braſs ring depended, which is commonly the mark of a previous diſorder in the neighbouring eye, but both eyes were in a ſound ſtate. As the mouth happened to be open, it was obſerved that there were but few teeth in the jaws.

Abdomen. The inteſtines were here and there marked with livid ſpots. They were unuſually contracted, the natural conſequence of the daily vomiting. The large inteſtines, however, were contracted for a ſhort ſpace only, as they contained fæces, though not in a large quantity. The ſtomach was in an unuſual ſituation, of an uncommon length, and had a very peculiar poſition: For, beginning at the uſual place, (no part of the œſophagus having paſſed into the belly) it proceeded through the left ſide of the belly, in a ſtrait line, down as far as the pubis; from whence it turned upwards towards the right ſide, and terminated in the duodenum. It was of a moderate breadth; and contained nothing but a thin poultice-like maſs, which was ſuppoſed to be the remains of the little food that had been taken in. When the pylorus was handled, externally a conſiderable hardneſs was felt. On opening the ſtomach, the ring of the pylorus was obſerved to be divided as it were into two or three protuberances, which, although not large, were hard. That part of the ſtomach next the pylorus was indurated to

the extent of two fingers breadth; the coats being there thickened, and in a ſtate approaching to the hardneſs of bone. They were not really oſſified, nor did they ſtraiten the paſſage; but, in conſequence of their unyielding ſtate, they had been incapable of propelling the food into the duodenum. For a ſhort ſpace from the indurated portion, the internal ſurface of the ſtomach was ſlightly livid. It is probable that the ſtomach contained quickſilver, which had flowed out when that organ had been moved to one ſide; for it was found, to the quantity of an ounce and a half, within the duodenum, which had been tied up a litlle below the pylorus. It was not obſerved in any of the other inteſtines. The urinary bladder contained little urine, and was in a ſound ſtate; as was alſo the urethra; but no veſtige of the ſmall, oblong, oval protuberance, generally placed at the beginning of the urethra, could be traced at that part. The ſlender line which terminated as uſual in the verumontanum appeared.

Thorax. The heart, as might be expected, was deſtitute of fat; but, what was very remarkable, more eſpecially in a man who was of a tall ſtature, who had been always employed in a laborious manner of living, and who had been accuſtomed to lift heavy burdens, it was ſo ſmall, that it appeared rather to be the heart of a child than that of a man. All its dimenſions, as well as

as the thickneſs of its parietes, were in exact proportion to the ſmallneſs of its ſize. No diſeaſe appeared, externally nor internally; except that the ſuperficial veins were in ſome parts varicoſe. Although the trunk of the aorta ſeemed to be dilated, the valves were in a natural ſtate. The diaphragm had become oſſified at the right ſide of the centrum tendineum; or at leaſt, at that part, a bony lamina, of ſome thickneſs, meaſuring an inch and an half in length, narrow at one of the extremities, and becoming gradually wider at the other, but no where exceeding a finger's breadth in width, was placed between the pleura and peritoneum.

Head. A ſmall quantity of fluid was found in the lateral ventricles. On the choroid plexuſſes, within the lateral ventricles, where they are reflected upwards at an angle to cover the thalami nervorum opticorum, a pretty large hydatid, appearing at firſt like mucus, was obſerved. The pineal gland ſeemed very ſmall: it contained a corpuſcle, which, in proportion to the ſize of the gland, was not inconſiderable. This little body was of an irregular figure; was hard, not friable, and was of a dirty yellow colour. The medulla ſpinalis was very flabby.

Case

Case VIII. (xxxix. 14.)

A slender woman, of about forty years of age, who had been much ſubject to hyſteria, and particularly to violent hyſteric paroxyſms, which affected her whole body, and more eſpecially the viſcera of the abdomen, with convulſive motions, after having had ſome fits that were more violent than uſual, began to obſerve an evident depreſſion in the epigaſtric region, and at the ſame time a ſwelling in the hypogaſtric. The depreſſion never changed; but the ſwelling often altered within the ſpace of a ſingle day; for, although it appeared large and very hard, it often ſuddenly ſubſided. When ſhe took food, ſhe obſerved that it deſcended into that part and increaſed the ſwelling, and alſo rendered the ſenſation of weight which ſhe always felt there more uneaſy. At the diſtance of four or five hours from that time, ſhe uſually became affected with violent pains, tormina, and faintings. She often complained that all her bowels had fallen out of their proper ſituation, as ſhe expreſſed it. Her digeſtive powers were obviouſly impaired. She was feveriſh, and was much emaciated. Having lived in this manner for three months, ſhe died.

Appearances on Diſſection.

Abdomen. The ſtomach was found to have fallen

fallen down into the epigaſtric region; ſo that there was ſcarcely four fingers breadth between it and the pubis. That part which is connected to the œſophagus was ſo much elongated, that the whole fundus of the ſtomach lay in the epigaſtrium.

Case IX. (xl. 23.)

An old man, apparently ſixty years of age, who was ſo very beggarly that he was forced to pick up a miſerable ſubſiſtence from the outer rinds of melons, or any other ſubſtance thrown into the ſtreet, having become affected with fever, together with a ſenſe of oppreſſion in the cheſt, attended by difficult reſpiration, weak pulſe, conſtant cough, and the expectoration of catarrhous matter, was received into the hoſpital of Bologna, where he had formerly repeatedly been. After he had felt himſelf conſiderably relieved, he went out again into the ſtreets; but within a ſhort time he returned into the hoſpital. He was then ſo much emaciated, and ſo much exhauſted by diſeaſe, cold, and hunger, that he died ſoon after his admiſſion.

Appearances on Diſſection.

Abdomen. The ſtomach was large, although it contained almoſt nothing. Internally it had no rugæ; and was of a browniſh colour, here and there,

there, for a conſiderable ſpace, from the middle towards the left ſide, and eſpecially towards the œſophagus, where the brown colour penetrated more deeply. The whole convex ſurface of the liver, except a ſmall ſpace at the lower part on the right ſide, adhered firmly to the ſeptum tranſverſum. In that part, the ſurface was hollowed out by an hydatid of the diameter of a finger's breadth. The membrane of the convex ſurface of the ſpleen was in one part of a white colour, and the middle of that part was become bony to a ſmall extent. The ſpleen itſelf was of a ſofter conſiſtence than uſual, and was larger rather in thickneſs than in length or breadth. The ſplenic artery, however, appeared wider than even that increaſed thickneſs required. The meſenteric glands were very diſtinct, although in a man of that age. Many of them were of the ſize of a bean; but, when examined accurately, they were found to be certainly free from diſeaſe. The ſize of the kidneys was unuſually ſmall in proportion to that of the body. The appearance of their ſurface was uncommon; for they were equally convex on the poſterior as on the anterior ſurface. Both ſurfaces were unequal, and in ſome degree knotty; and more eſpecially in the left kidney. That kidney too exhibited certain depreſſions as if from cicatrices. The orifices of the ureters within the bladder ſeemed larger than uſual. The bladder itſelf internally

was of a red colour; and was here and there marked with ſanguiferous veſſels, which were as diſtinct as if they had been filled with coloured wax. Externally it was furniſhed with redder fibres than uſual. The iliac arteries were tortuous, as the ſplenic artery generally is. The iliac veins, as far as their diviſion, were ſo much corrugated, as it were, that they could be extended with difficulty.

Thorax. Within the thorax, as well as in the pericardium, a ſmall quantity of watery fluid was found. The lungs were attached firmly to the ſides and to the back. The right lobe, when drawn away, left a kind of opaque, thick, firm, uniform coat, adhering to the parietes of the thorax, extending from the lower part to beyond the middle of its length, and from the ſpine almoſt to the ſternum. This membrane, when pulled by one extremity, and by the part attached to the ſternum, was drawn off entire. It neither belonged to the pleura, nor was it the membrane of the lungs; for both theſe parts remained in their natural ſituation. It was therefore probably a membrane formed in conſequence of inflammation. The lungs themſelves were not very ſound. In the upper part of one of the lobes a hard ſubſtance was perceived. The heart was twice as large as it naturally is: it contained no blood, but only a few moderately ſized polypous concretions. Both ventricles were dilated. The right ventricle, and the

correſponding auricle, which was alſo much dilated, had very thin parietes; on the contrary, the parietes of the left ventricle were thicker and harder than uſual. The valvulæ mitrales were enlarged, and their lower edges were much thickened and knotty. The ſigmoid valves were not ſo ſoft as uſual; and the ſemilunar were ſtill leſs yielding; one of them being already bony at one part of its lower circumference. The aorta, before its curvature, was wider than uſual. The whole of its internal ſurface was marked here and there with white ſpots; and the ſame appearance was obſerved within the iliacs. Some of theſe ſpots appeared prominent on the internal ſurface, and were very hard and bony. This was more eſpecially the caſe at that part from whence one of the inferior intercoſtals went off. The orifice of that veſſel, happening to lie in the center of the ſpot which protuberated in a circular form, had been in conſequence ſo ſtraitened, that, together with the ſpot, it at firſt ſight appeared like a large lenticular gland.

CAUSES OF HECTIC FEVER.

PREDISPONENT CAUSE. Daily obſervation proves that perſons of a ſcrophulous habit are chiefly prediſpoſed to hectic fever; but, as it is well known that

that thoſe of a different habit are alſo liable to the diſeaſe, ſcrophula cannot be conſidered as the ſole prediſponent cauſe. In every caſe, the diſeaſe is preceded by general debility of the ſyſtem. It may therefore be probable, that the effects of the exciting cauſes cannot take place unleſs the body be in that ſtate. It muſt be confeſſed, however, that this mode of reaſoning is not perfectly ſatisfactory.

Exciting Causes. An author of the higheſt eminence has alleged, that the abſorption of purulent matter is the ſole exciting cauſe of hectic fever*; while another, of conſiderable reſpectability, has denied that the diſeaſe is ever produced (at leaſt in phthiſis pulmonalis) by that cauſe†. Both are certainly miſtaken: for, unleſs the evidence of the ſenſes be entirely laid aſide, it cannot be doubted that hectic fever is very often induced by the abſorption of pus; but, on the other hand, it muſt be alſo allowed that the diſeaſe ſometimes occurs where no pus could be abſorbed.

Suppuration in the lungs, in the liver, in the meſenteric glands and other abdominal viſcera, in the external parts of the body, and throughout the whole ſyſtem, as in caſes of ſmall pox, &c. often act as exciting cauſes of this diſeaſe; but, as they do not

* Dr. Cullen's Firſt Lines, par. 861.

† Vide, An Eſſay on the Nature and Cure of Phthiſis Pulmonalis, by T. Reid, M. D. firſt edition, page 39, et ſeq.

uniformly produce the effect, it has been ſuppoſed that ſome peculiar ſtate or condition of the matter abſorbed is requiſite for this purpoſe *.

In thoſe caſes where this fever cannot be traced to the abſorption of purulent matter, all the various circumſtances from whence the diſeaſe can be thought to originate, tend uniformly to produce one effect, viz. the prevention of a regular ſupply of chyle. Thus, obſtructions of the meſenteric glands, indurations of the ſtomach and other chylopoetic viſcera, exceſſive habitual evacuations, great irregularities in diet, as frequent drunkenneſs, and long continued affections of the mind that impair the appetite for food, as immoderate grief, which have been long acknowledged by practitioners to be occaſional exciting cauſes of hectic fever, agree only in one reſpect, that of preventing the ordinary ſupply of chyle.

On the whole, therefore, it is preſumed that the abſorption of purulent matter, and every circumſtance which tends to prevent the formation or the ſupply of chyle, occaſion this diſeaſe.

Proximate Cause. From the phenomena of hectic fever, the proximate cauſe has been generally ſuppoſed to be irregularity of action of the vaſcular ſyſtem in conſequence of an acrimonious ſtate

* Vide, Dr. Cullen's Firſt Lines, par. 861.

ſtate of the blood. This opinion, however, is neither ſatisfactory to the theoriſt, nor uſeful to the practitioner. As the qualities of the blood are not yet accurately known, it may indeed be urged that it is not eaſy to employ any other epithet than that of acrimony, for expreſſing the particular condition of that fluid which excites irregular action of its containing veſſels. It is probable, however, that in the preſent inſtance a more accurate expreſſion may be adopted. That the blood cannot perform its natural functions, unleſs it be conſtantly ſupplied with oxygen and with chyle, is generally believed; and that hectic fever is occaſionally produced by circumſtances which prevent or diminiſh the ſupply of the latter fluid, has been proved: May it not therefore be concluded, that the morbid ſtate of the blood, in the diſeaſe under conſideration, conſiſts in a deficiency of chyle? If this were admitted, it would follow as a conſequence, that the abſorption of purulent matter, where it proves the exciting cauſe, acts by deſtroying the properties of the chyle. As an objection to this explanation, it may perhaps be alleged, that the diſeaſe is commonly aggravated after meals; whereas, were the hypotheſis now offered juſt, it ſhould be always alleviated at thoſe times. In reply; it may be obſerved, that the circumſtance which furniſhes this objection has not been univerſally acknowledged by practitioners;

ers *; and therefore cannot be aſſumed as a principle.

REMARKS ON THE ANOMALOUS CASES OF TABES.

THE firſt, fifth, ſeventh, eighth, and ninth caſes, afford ſtrong preſumptive evidence in favour of the idea, that hectic fever is immediately produced by a deficiency in the ſupply of chyle; for in all of them the principal morbid appearance occurred in the ſtomach. Thus, in the firſt and fifth caſes, that organ was ulcerated; in the eighth, it was enlarged, and had its ſituation altered; in the ninth, its internal ſurface was diſeaſed; and, in the fifth and ſeventh, the pylorus was indurated. In the ſixth caſe, it is probable that the diſeaſe was occaſioned by the long continued diarrhœa; which gives additional ſupport to the ſame opinion.

Could the ſwelling and ſuppuration of the lymphatic glands, which were noticed in the firſt caſe, proceed from the ulceration of the ſtomach?

The ſecond caſe is an example of hectic fever complicated with dropſy.

The cauſes of the diſeaſe in the third and fourth caſes are quite obſcure.

CHAP.

* It is denied by Dr. Cullen, Firſt Lines, par. 859.

CHAP. II.

INFLAMMATIONS.

General Observations on Inflammation *.

INFLAMMATION † consists of an increased action of the arteries, together with such an augmentation of blood within them as occasions the sensation of heat and pain. An external part of the body therefore is said to be inflamed, when the action of its vessels is increased, and when it is red, hot, painful, and swelled. Although inflammation be local, yet if it be considerable, or seated

* In this part of the work, inflammation situated within the head, neck, chest, and belly, is alone to be considered. Previous to that, it appears necessary to offer some observations on the nature of inflammation in general.

† On the subject of inflammation the reader may consult the Works of the late Dr. Whytt, page 211; M'Bride's Works, 4to edit. page 157; Dr. Cullen's First Lines, par. 2, 35, &c.; and an Essay by Dr. Carmichael Smith, in Med. Communications, vol. ii. page 168, from which the principal observations here offered are borrowed.

ed in internal organs, the action of the whole vascular system is accelerated: consequently the inflammation of an internal part is indicated, by pain and interrupted function of the affected organ, increased heat of the whole body, and accelerated action of the vascular system.

The phenomena of inflammation are different, according to the nature of the exciting cause, the function or use of the part inflamed, and the natural or acquired texture of the same.

The inflammation produced by many of the exciting causes, although left entirely to nature, frequently terminates favourably, running a certain course; while that excited by others cannot be overcome by the natural powers of the constitution.

The function or use of the part inflamed influences the phenomena very considerably. Thus it is obvious that the inflammation of the stomach and bowels must be attended with some symptoms which do not appear in that of the hands or feet.

The natural texture or structure of the inflamed part occasions much variety in the phenomena. The inflammation of the skin, of the cellular membrane, of mucous membranes, of diaphanous membranes, and of muscular fibres, is accompanied in each case with different symptoms.

The last circumstance mentioned as influencing

the phenomena is, the texture of the organ having been previouſly altered by the diſeaſe. The beſt illuſtrations of this occur in the caſes of ſcrophula and tubercles in the lungs.

Beſides theſe circumſtances, which are enumerated by Dr. Carmichael Smith, it is probable that the phenomena of inflammation are affected alſo by the ſtate of the veſſels that conſtitute the diſeaſe.

The ſeat of inflammation is the arterial ſyſtem chiefly; but the incipient branches of the veins alſo generally appear unuſually diſtended; and the capillary veſſels, and ſometimes too the lymphatics, are loaded with blood.

CAUSES OF INFLAMMATION.

PREDISPONENT CAUSE. Although it be very obvious that the application of certain exciting cauſes produces inflammation in almoſt every variety of habit; yet it cannot be doubted, not only that ſome perſons are more ſuſceptible than others of the impreſſion of thoſe cauſes; but, alſo, that there are particular ſtates of the ſyſtem, which render an individual more readily affected by them at one time than at another.

Perſons of a rigid fibre, and of a ſanguine temperament, and thoſe who indulge much in the

uſe of animal food and ſtrong fermented liquors, are particularly liable to inflammation. Plethora ſeems a great prediſponent cauſe; but it may be the effect of a peculiar ſtate of the veſſels, which ought rather to be conſidered as ſuch. Women are leſs prediſpoſed to inflammation than men.

Beſides the circumſtances which render an individual ſubject to inflammatory complaints in general, there muſt be others which determine the ſeat of inflammation. Thus, of two perſons expoſed to cold, one ſhall have cynanche tonſillaris, and the other pneumonia. This muſt depend upon ſome ſtate of the veſſels of the affected part; but the preciſe nature of that ſtate is involved in much obſcurity. Some authors have imagined that it conſiſts in an increaſed tone or contractility of the muſcular fibres of the arterial ſyſtem *. Others, on the contrary, regard it to be quite the reverſe. The moſt plauſible argument in favour of the latter opinion is, that parts which have been once inflamed are exceedingly apt to be again ſimilarly affected. Still, however, the queſtion does not appear to be ſatisfactorily ſolved.

Exciting Causes. Every circumſtance which either renders the part acted upon unuſually affected by its ordinary ſtimuli, or increaſes the number

* Vide Dr. Cullen's Firſt Lines, par. 247.

number or power of the ſtimuli applied to it, has been regarded as an exciting cauſe of inflammation *. This is a very ingenious arrangement, but a more minute one is neceſſary for the explanation of the phenomena.

All the exciting cauſes of inflammation may be arranged under the following heads: Mechanical Stimuli, Chemical Stimuli, or thoſe which do not act mechanically, an Increaſed Degree of the Ordinary Stimuli, Diſeaſes of the General Syſtem, and Certain Degrees of Cold.

1ſt, *Mechanical Stimuli*, include blows, whether attended with diviſion of parts or not; and obſtruction to the courſe of the blood, from preſſure, &c. where it excites pain, or irritates the veſſels.

2dly, *Chemical Stimuli* comprehend not only chemical ſtimuli properly ſo called, as cauſtics, &c. but alſo all the ſtimuli, the operation of which cannot be explained on mechanical principles. Such are certain poiſons generated in the bodies of animals, either naturally or morbidly; as the venom of inſects, and what is termed the venereal virus, &c.

3dly, *An Increaſed Degree of the Ordinary Stimuli of a part*. Thus light produces inflammation

* Vide Tentam. Med. Inaug. quædam de Inflammatione complect. auctore Rich. Fowler, Edinburgi 1793, p. 4.

of the eyes, when applied in a degree to which the eyes have not been accuſtomed.

4thly, *Diſeaſes of the General Syſtem.* Under this head may be claſſed fevers, and caſes where the fluids are impregnated with poiſonous matter, ſuch as the contagion of ſmall-pox, &c. and alſo caſes where the component parts of the blood are not in due proportion to each other.

Laſtly, *Certain Degrees of Cold.* It is not eaſy to explain the preciſe degrees of cold which produce inflammation. Experience ſhews that thoſe degrees vary according to the previous ſtate of the ſyſtem. Thus, if the body be paſſed ſuddenly from a very warm temperature to a cold one, as for example, from one of ſeventy degrees of Farenheit, to one of thirty-five or forty, inflammation will be induced. But if the change from theſe degrees be made gradually, no ſuch effect follows. Some degrees of cold are productive of mortification; and it has been ſuppoſed, that the degrees immediately preceding thoſe in the ſcale excite inflammation.

The heat of the human body may be diminiſhed either by the temperature of the air by which it is ſurrounded, or by the application of moiſture of a lower heat than that of the body.

It has been alleged that the ſubtraction of heat, or according to common language, the application of cold, cauſes inflammation, by ſtopping the

the perſpiration; but it is probable that it generally produces the effect of exciting the veſſels into unuſual action.

Proximate Cause. Although many theories have been propoſed on this ſubject *, three only ſeem to merit any attention. *Firſt*, That along with increaſed action of the blood-veſſels there is a ſpaſmodic ſtricture on their extremities; *Secondly*, That, beſides the action of the veſſels being increaſed, the reſiſtance to the courſe of the blood is diminiſhed; and *Thirdly*, That the action of the veſſels is impaired, from their coats being in a debilitated or paralytic ſtate.

The firſt of theſe theories is adopted by Hoffman and Dr. Cullen. The chief arguments in its favour are, that every conſiderable inflammation is preceded by a cold fit, and is accompanied with other ſymptoms denoting ſpaſm on the extreme veſſels; and that the moſt effectual means for the cure of inflammation are thoſe which are calculated to moderate the action of the veſſels, and to induce relaxation over the whole ſyſtem. But as the beginning veins of an inflamed part are in a ſtate of over-diſtenſion, as well as the arteries, it is

* A view of the various hypotheſes of inflammation is exhibited in Meza Compend. Med. Pract. Faſcicul. alt. Inflam. et Dolor. Siſt. in præfat.

is evident that there can be no ſpaſmodic ſtricture, ſuch as is ſuppoſed by this hypotheſis.

The ſecond opinion has been particularly recommended to notice by Dr. M'Bride *. That the action of the arteries in the affected part is encreaſed, cannot poſſibly be doubted: it is proved not only by the nature of the exciting cauſes, but alſo by the phenomena of the diſeaſe. The circumſtances which ſeem to ſhow that the reſiſtance to the courſe of the fluids is diminiſhed, are, the effect produced by cupping glaſſes applied to the ſurface of the body, viz. Temporary Inflammation, the ſame event following the application of warm water or emollient poultices to particular parts; and the well known tendency of the blood to puſh towards the weakened part, wherever the coats of a veſſel are divided. It remains however to be aſcertained, whether increaſe of action be compatible with a weakened ſtate of the veſſels. In order to judge of this, it is neceſſary to recollect, that the parietes of the arteries are compoſed of three coats, viz. a tough membranous one, commonly called elaſtic, a muſcular one, and a ſmooth thin membranous one; that theſe coats are ſupplied with blood-veſſels; and that the action of the arteries depends very much, though perhaps not ſolely, upon the influence of the nervous

* Vide quarto edition of Dr. M'Bride's Works, p. 159. et ſeq.

vous ſyſtem. Now the queſtion is, Whether it be poſſible for the muſcular coat to poſſeſs an increaſed power, while the elaſtic one is weakened? On theoretical principles this might be admitted: for the action of the elaſtic coat is purely mechanical; while that of the muſcular one is, to a certain extent at leaſt, influenced by the nervous ſyſtem.

The third opinion has been lately offered by Mr. Latta*. The principal argument in favour of it is deduced from the ſwelling of the inflamed part; which, in his opinion, is owing to a partial ſtagnation of blood: ſo that there muſt of conſequence be a deficiency inſtead of an increaſe of action. The phenomena of inflammation, however, are by no means conſiſtent with this idea. The unuſual heat of the part; the throbbing pain; and where theſe are conſiderable, the accelerated action of the whole ſanguiferous ſyſtem, clearly indicate an increaſe of action in the veſſels. This is farther proved by the conſequences of inflammation; for mucous membranes, when inflamed, afford a greater than uſual quantity of their ſecretions; diaphanous membranes pour out an increaſed quantity of the thin fluid which they commonly ſecrete, and in cellular parts, a fluid, called

* Vid. A Practical Syſtem of Surgery, by James Latta, Surgeon in Edinburgh, vol. i. pag. 95.

called pus, is furniſhed by the veſſels, differing in its properties from any of the natural fluids.

General Phenomena of Inflammation within the Head, Chest, and Belly.

All the contents of the great cavities above mentioned are compoſed of three different materials; viz. mucous membranes; what are called diaphanous membranes; and cellular and glandular ſubſtance. Theſe materials exiſt either ſingly or combined.

Firſt, The inflammation of mucous membranes differs from that of other parts, in being attended with little pain. It is diſtinguiſhed by the ſenſation of increaſed heat and of foreneſs; and by the ſecretion of the membrane being changed in its qualities and appearance. In the healthy ſtate, the mucous membranes, viz. all thoſe lining the internal cavities of the body to which the air has acceſs, furniſh a mild tranſparent ropy fluid, like thin ſtarch, quite inſipid to the taſte, and poſſeſſing all the qualities of mucilage. This fluid, when thoſe membranes are inflamed, is of a very different nature. It is at firſt thin and acrid, frequently excoriating the very membrane by which it is prepared; then its quantity is increaſed, afterwards it is gradually diminiſhed, and becomes

thick and opaque, reſembling purulent matter; and finally, in favourable caſes, it returns by degrees to its natural ſtate. This, however, is not the uniform courſe of thoſe changes; but it is unneceſſary to enumerate the various deviations here, as they are ſtated under particular articles.

Ulcerations are the frequent conſequences of this ſpecies of inflammation, and in ſome inſtances alſo gangrene.

The changes produced on the membranes themſelves are an increaſe of thickneſs and ſenſibility, ſucceeded, after the morbid affection has ceaſed, by diminiſhed energy and great ſuſceptibility of inflammation from the ſlighteſt cauſes.

Secondly, What are called diaphanous membranes are, the dura and pia mater, the pleura, the pericardium, the peritoneum, the tunica vaginalis teſtis, the perioſteum, and the capſular ligaments of the joints. The inflammation of theſe membranes is not marked by any peculiarity of ſymptoms, unleſs it affect the general ſyſtem. It is then diſtinguiſhed moſt commonly by acute pain of the affected part. This ſpecies, however, is chiefly characteriſed by the effects produced on the diſeaſed parts: for theſe membranes, when inflamed, are found thickened, opaque, and ſloughy, with a gelatinous or purulent exudation on their ſurface ſometimes cauſing preternatural adheſions. At other times, the cavities which they inveſt are

filled with a turbid ſerum, with filaments floating in it. Sometimes this inflammation terminates in gangrene; but, except in ſuch caſes, there never is any loſs of ſubſtance in the parts.

Thirdly, The inflammation of cellular and glandular parts, when ſeated externally, is very eaſily diſtinguiſhed from every other ſpecies. It is attended with throbbing pain, and it terminates moſt frequently in ſuppuration or abſceſs. But when it occurs in internal parts, it is not diſcriminated with ſuch facility. In general, it may be judged preſent, if, along with throbbing or fixed pain, increaſed action of the whole vaſcular ſyſtem take place, and more eſpecially if, under theſe circumſtances, blood drawn from a vein exhibit what is called a buffy coat.

The parts affected with this ſpecies of inflammation, which is termed *Phlegmon*, are always ſwelled, from the extravaſation or effuſion of ſerum and lymph from the inflamed veſſels, and alſo from the increaſed quantity of blood in thoſe veſſels.

The termination of this ſpecies is various. In ſome caſes, the increaſed action of the veſſels ceaſes, the effuſed fluids are abſorbed, and the natural ſtate of the part is reſtored. This favourable event is ſtyled *Reſolution*. In other caſes, there is an effuſion of a bland, opaque, yellowiſh fluid, ſomewhat like cream, called Pus. This is termed *Suppuration*. Sometimes, too, by ſome morbid

morbid affection of the veſſels, the red particles of the blood, as well as the lymph and ſerum, are thrown out, and, inſtead of pus, an acrid corroſive fluid is formed, which deſtroys the neighbouring parts; and this termination is named *Gangrene*.

SECT. I. *PHRENITIS.*

PHRENZY occurs both as an idiopathic and a ſymptomatic diſeaſe. The former ſpecies ſeldom appears in this iſland, and the latter not very often.

The ſymptoms of idiopathic phrenzy are: violent headach, attended with acute inflammatory fever; a redneſs of the face and eyes, an impatience of light or noiſe, a ſtate of conſtant watching, and the moſt furious delirium *. The veſſels of the head are turgid; the temporal arteries throb; the eyes ſparkle, and are violently agitated; the tongue is dry, rough, and of a yellow or black colour. The patient is outrageous by fits: he grinds his teeth; his hands tremble; and he makes frequent violent attempts to get out of bed. Theſe ſymptoms are preceded by long continued

* Vide Cullen's Firſt Lines, par. 291, et ſeq.

and almoſt conſtant watching, or frightful dreams; acute pains, at firſt in the neck and occiput, afterwards extending to the head; no deſire for drink; deep reſpiration; irregular pulſe; ſuppreſſion of urine; and inability to recollect circumſtances that have juſt happened *.

Phrenitis is diſtinguiſhed from mania, by the quickneſs of the pulſe; and from that ſpecies of delirium which occurs in low nervous fevers, and is not produced by inflammation, by the appearance of the countenance and eyes. For, in true phrenzy, the face is red, the features are rather enlarged than ſhrunk, and the eyes protuberate and ſparkle; whereas, in the delirium ſupervening to low fever, the face is pallid, the features are ſhrunk, and the eyes pearly.

Although it has been ſuppoſed that ſymptomatic phrenitis ſupervenes to fevers of every kind †, and to all inflammatory and painful complaints; yet it is probable it only occurs in the latter caſes.

The author of theſe remarks has often ſeen phrenitis in lying-in women. He cannot however determine, whether it ought, under ſuch circumſtances, to be ſtiled idiopathic or ſymptomatic.

* Vid. Conſpect. Therapiæ Specialis, auctore D. Joanne Juncker, pag. 520; from which the above deſcription is chiefly taken.

† Vid. Sauvage Noſolog. Method. tom. i. pag. 458.

matic. In all the cafes which he has attended, the difeafe occurred within forty-eight hours after delivery; and in all of them too it proved fatal before the end of the fixth day. In fome of them the delivery had been natural, though tedious; while in others it had been exceedingly difficult. One of the patients had always had a ftrong predifpofition to inflammatory complaints, and more efpecially to inflammation of the parts within the thorax. The phrenzy was uniformly preceded by watchfulnefs, quick hard pulfe, and wildnefs in the eyes; and was ufhered in by violent pain of the head, great fufceptibility of the impreffion of light and noife, and a hurried mode of fpeaking. In every cafe the pupils of the eyes became quite dilated within forty-eight hours from the commencement of the phrenzy; fo that the light ceafed to make much impreffion. Throughout the courfe of the difeafe the pulfe varied from one hundred and twenty to one hundred and forty, and at laft it was intermitting and indiftinct. It was very remarkable, that, until a few hours before death, there appeared to a fuperficial obferver no morbid change in the features of the face; in fo much, that it was difficult to perfuade the attendants that any danger threatened. At that time, viz. fix or eight hours previous to the fatal event, a very fudden alteration happened. The outrageous delirium at once ceafed; the extremi-

ties

ties became cold; the features of the face ſhrunk amazingly; the eyes ſeemed fixed in their ſockets, and had a peculiar ſhining appearance, as if covered with a glairy fluid. Partial ſweats broke out on the face, neck, and breaſt; ſtertorous breathing gradually commenced; ſubſultus tendinum ſupervened: and the patient ſunk. This diſeaſe was very accurately diſtinguiſhed from puerperal fever, even at the beginning, by the abſence of pain and foreneſs in the abdomen, and of uneaſineſs of breathing.

Symptomatic phrenitis is known to threaten in inflammatory or painful complaints, if, after continued watching or frightful dreams, pain in the head and tinnitus aurium take place, together with a peculiar wildneſs in the appearance of the eyes.

Phrenitis, whether idiopathic or ſymptomatic, is a very dangerous and alarming diſeaſe: for it generally proves fatal between the third and ſeventh day, and if protracted beyond that time it terminates in mania or fatuity. Amauroſis, too, has ſucceeded to an attack of phrenzy.

Sometimes however the diſeaſe ends favourably, by a critical diſcharge of blood from ſome part of the body, moſt commonly the noſe; or by an univerſal ſweat, or copious diarrhœa, or even by depoſition in the urine.

The unfavourable ſymptoms generally enumerated

rated are: æruginous vomiting, the diſcharge of white or grey coloured fæces, frequent attempts to ſpit on the attendants, convulſions, and ſleep not preceded by a critical diſcharge. Subſultus tendinum, or convulſions, and coma, with cold ſweats and fluttering pulſe, announce the approach of death.

CASES of Symptomatic Phrenitis.

Case I. (vii. 13.)

A man, of a tall ſtature and of a lean body, who had been ſubject to inflammation of the cheſt from dreſſing flax, which was his trade, after having been ſix or ſeven times affected with that inflammation, along with a vomiting of bilious green matter at one time, and delirium at another, had his voice at laſt ſo much injured, that he ſeemed to croak rather than to ſpeak. On this account, he choſe out hemp which contained the leaſt duſt, and dreſſed it in a ſeparate place from his companions. By which means he had juſt recovered his natural voice, when, after having been fatigued with carrying a burden, he became affected with febrile coldneſs, and with a violent pain in the left breaſt. With theſe ſymptoms he was brought into the hoſpital of Bologna. Previous to this he had

had taken ſome almond oil, and had been bled from the left arm. As he breathed with difficulty, and had no expectoration, blood was drawn from the other arm. He lay moſt frequently on the affected ſide. He vomited bilious matter of a green colour. On the fifth day he became delirious; being ſometimes merry, ſometimes melancholic, and ſometimes ſo furious as to ſpit upon thoſe who approached him. Blood was drawn from his leg near the ancle; and a cataplaſm, compoſed of new cheeſe of the coarſeſt kind mixed with oil of violets, was applied to his head after it had been ſhaved, and was ordered to be renewed three times a day. In the mean time convulſive motions, at firſt ſlight, and under the form of ſubſultus tendinum at the wriſts, afterwards more conſiderable, were obſerved. At length, neither was his breathing difficult, nor did he complain of any pain or uneaſineſs; but, on the contrary, when queſtioned on that ſubject, he always anſwered in the negative. He ſometimes however cried out; and made water involuntarily, ſo that he wetted the bed. His pulſe having become weaker, though not irregular, he died about the ſeventh day.

Appearances on Diſſection.

Abdomen. The ſtomach was ſound; the pancreas was ſomewhat hard, and rather thick. The edge of the liver ſuperficially was livid to a conſi-

derable extent. The gall-bladder was contracted, and contained a ſmall quantity of bile of a faint tobacco colour.

Thorax. No ſerous fluid was effuſed into the cavity of the thorax. The right lobe of the lungs was in a natural ſtate, except that it was every where cloſely connected, by intervening membranes, both to the ribs and to the diaphragm. The left lobe was connected to the pleura only in a few places on the fore part. Its ſuperior lobule, though in other reſpects ſound, was thin; and contained ſome purulent matter, of a white colour, in a kind of tubercle. Theſe appearances, as well as the adheſions of the right lobe, ſeemed to be the effects of preceding inflammations. The inferior lobule was of a red colour; was hard, heavy, and of a compact ſubſtance; and contained in its ſuperior part matter, or ſomewhat reſembling matter, flowing through the branches of the bronchia. From theſe appearances preſent inflammation in the incipient ſtage of ſuppuration was indicated. The pleura alſo, on the ſame ſide, obviouſly appeared to be completely inflamed; for its blood-veſſels were much more diſtinct than natural; and the whole membrane was drawn off from the ribs at a ſingle pull. The diaphragm too, at that part of its centrum tendineum, which lies under the left lobe of the lungs, had its moſt minute veſſels ſo much diſtended, that there could be no

doubt of its being there inflamed. The pericardium contained ſome turbid ſerous fluid, of a reddiſh colour. Through all the orifices of the heart polypous concretions projected. Theſe originated in the ventricles, and extended into the veſſels. They were all of a ſolid ſubſtance, except the beginning of that which went into the pulmonary artery; for the part of it within the right ventricle, though very thick, was compoſed of a yellow mucus-like ſubſtance.

Head. When the head was ſeparated from the trunk, long portions of coagulated blood were drawn out from the jugular veins, as ſwords from their ſcabbards. The veſſels of the meninges were exceedingly diſtended with blood. A polypous concretion, of a whitiſh colour, and compact ſtructure, not only filled the ſinus of the falx, but alſo extended into moſt of the veins which communicate with that ſinus. Coagulated blood was alſo obſerved in the other three ſinuſes of the dura mater. The pia mater had all its veſſels, even the moſt minute, ſo much diſtended with blood, that it was all over of a very red colour. Beneath it, on the convolutions of the brain, ſome ſerous fluid was obſerved. A ſmall quantity of the ſame kind of fluid, of a reddiſh colour, was found in the lateral ventricles. Many hydatids, of a conſiderable ſize, were ſeen on the poſterior part of the plexus choroides. Not only were the veſſels on

on the ſurface of the lateral ventricles greatly diſtended with blood, being much more diſtinct than uſual; but alſo veſſels, equally full and diſtinct, appeared, on the ſlighteſt inciſion, through the corpora ſtriata, the thalami nervorum opticorum, and throughout the whole medullary ſubſtance of the brain. In the cortical ſubſtance, however, both of the brain and cerebellum, the blood-veſſels could ſcarcely be ſeen.

Case II. (vii. 15.)

A woman, after having been for a conſiderable time in the hoſpital of Padua, on account of a blow on the head, and after having been diſmiſſed cured, became affected with fever and delirium; which terminated in death.

Appearances on Diſſection.

Head. There was no where any particular mark of the blow which ſhe had formerly received. On the internal ſurface of the dura mater, florid ſpots, like drops of blood, appeared. The veſſels of the pia mater were diſtended with blood. Serous fluid was found in ſome places under that membrane, but not in the ventricles. Veſicles were obſerved in the poſterior part of the plexus choroides. A little yellow coloured matter was ſituated at the fore part of the pineal gland. Every thing elſe was natural, except that the cere-

bellum was very flabby. No polypous concretions were seen in any of the vessels.

Case III. (vii. 2.)

A man, aged seventy years, by trade a potter, naturally of a cheerful disposition, much addicted to drinking, after having undergone great fatigue in business, and suffered much uneasiness of mind, became affected with fever, attended with violent pain in his left side. He was received into the hospital of Bologna. Blood was immediately drawn from his left arm. On the fourth day, the febrile symptoms were much aggravated; and on the sixth he grew so delirious, that it was necessary to bind him down. His pulse was quick, but not irregular; his respiration was difficult; and he had no expectoration. Blood was that day drawn from his ancle. The symptoms however continued to increase in violence; so that on the following day he had stertorous breathing, attended with profuse sweat over his whole body, and soon after died.

Appearances on Dissection.

Externally. The face of the carcase, and the superior extremities, were of a yellow colour, as in jaundiced persons; the other parts of the body, except the haunches, which were somewhat livid, were of the same colour in a slighter degree.

Abdomen.

Abdomen. The omentum was obſerved to be very ſhort, and drawn upwards. The coat of the ſpleen, on the lower part of the gibbous ſurface, was exceedingly hard. The liver was connected to the diaphragm by its whole convex ſurface, except the edge and parts immediately adjoining. The edge and the greateſt part of the hollow ſurface were livid, to the depth of two lines. The remaining part of the liver was of a pale colour, and variegated like marble; and the whole of its ſubſtance was a little hard. The bile in the gall-bladder was in ſmall quantity, and reſembled putrid blood, or water in which meat had been waſhed. Its paſſage into the inteſtines had not been obſtructed; for the fæces were tinged with it. The inteſtines were diſtended with air. Yellow coloured fat adhered to their external ſurface, and a ſmall quantity of ſerous fluid ſurrounded them in the lower part of the pelvis. The portion of the inteſtinal canal, and of the ureters which lay on the pelvis, was of a brown red colour. The urinary bladder was diſtended with urine; and as well as its contents was yellow. The ſanguiferous veſſels towards the cervix, both poſteriorly and anteriorly, were turgid. On the right ſide of the fundus, two ſmall cells, each capable of containing a large cherry, and each communicating with the bladder by an opening, the diameter of which was as large as a lupin, were obſerved. The parietes

rietes of these cells were of the same structure as the bladder itself. In the remaining parts of the fundus, the beginnings of other cells of the same kind could be plainly perceived. A great number of enlarged and thickened veins surrounded the right testis on all sides; and the substance of that body was so compact that its structure could not be developed as usual. Below the testis there was a small osseous body. The tunica vaginalis adhered to the right testis everywhere, except on the superior part, where there were two vesicles filled with a yellow coloured serous fluid. The same coat adhered also to the other testis, except at the epidydimis, where there was a space filled with similar fluid. On examining the penis, no traces of frænum, except a small white mark, could be discovered. Nothing remarkable was seen in the urethra, but a few minute granules of concreted mucus, like the powder of tobacco, situated on each side of the seminal caruncles. These bodies too appeared as if glued down to the urethra. Throughout the prostate gland, especially on the right side, similar granules were found wherever it was cut into.

As far as could be learned, this man had never mentioned any complaint in the urinary system.

Thorax. The first circumstance which attracted notice was the appearance of the cartilages by which the inferior ribs are joined to the ster-

num

num on the right ſide; for they projected outwards, as if from ſomething within. But, as nothing whatever was obſerved internally which could account for the phenomenon, it is probable that it had been occaſioned by the great exertion of the right pectoral muſcle during his youth, that had been perhaps neceſſary in acquiring the rudiments of the trade by which the man had gained his livelihood. Every thing was ſound in the right cavity of the thorax; but in the left, a conſiderable quantity of yellow coloured ſerous fluid was found. When this was removed, ſubſtances, as if pieces of a thick yellow reticular and eaſily lacerated membrane, appeared over the ſurface of the lungs. Theſe membranous portions were in greateſt quantity on the inferior ſurface of the lower lobe and between the lobes. Almoſt the whole of the inferior lobe was hard and heavy. On being cut into, its ſubſtance was found of an uncommon compact ſtructure, more like that of the liver than of the lungs, and of a white colour. The inflammation ſeemed to have begun to terminate in ſuppuration; for thick white matter was preſſed out from ſeveral ſmall orifices, probably openings into the bronchia. The upper part of the ſuperior lobe was diſtended with frothy blood, and was black and hard. The hardneſs appeared rather to have originated from ſome former than from ſome recent diſeaſe. The remaining

portion

portion was found. That lobe was connected to the pleura laterally and anteriorly, by many ſtrong faſciculated fibres of a red colour, but apparently of a membranous nature. It alſo adhered very ſtrongly to the pleura at the upper part of the pleura; was there thickened, and could be eaſily pulled away from the ribs; which could be ſtill more readily done at the part where it lay under the inferior lobe. At that place, it was more thickened and of a deeper red. The external ſurface of the pericardium, on the left ſide, was of a red colour, in conſequence of the ſmall ſuperficial veſſels being diſtended with blood. Within the pericardium there was a ſmall quantity of a yellow watery fluid. A thick polypous concretion was found in the right auricle; a ſimilar ſubſtance, of a round form, was perceived in the pulmonary artery; and alſo one of the ſame kind in the aorta: and it appeared that, in the left auricle and ventricle, there were ſome ſimilar ones. When theſe polypi were looked at longitudinally, their ſubſtance ſeemed compoſed partly of a ſoft yellow mucus, and partly of a reddiſh fibrous ſtructure. On the internal ſurface of the aorta, above the valves, there were oſſeous lamellæ. The annular cartilages in the trunk of the aſpera arteria, and in the beginning of the bronchia, were oſſified in the middle part, by which they had a ſmall degree of flexibility only; and when the oſſified

portions were broken, ſomething like the rudiments of marrow appeared within them.

Head. A white, firm, ſlender polypous concretion was ſeen in the left lateral ſinus, and alſo in the fourth and third, and in ſome of the veins communicating with the latter. All the veſſels of the pia mater, on the left ſide of the head, and even where it enveloped the cerebellum, were ſo much diſtended with blood, that their trunks were turgid, and their ſmalleſt branches were conſpicuous. There was a great quantity of ſerous fluid on the external convolutions of the brain, which ſhined through the pia mater, and reſembled jelly. The ventricles were not entirely deſtitute of fluid. On the plexus choroides there were hydatids; but the plexuſes were not diſcoloured. Neither the veſſels which paſs through the medullary ſubſtance of the brain, nor thoſe which extend along the parietes of the lateral ventricles, appeared to be diſtended with blood, as the veſſels of the pia mater were.

CAUSES of Phrenitis.

Predisponent Cause. As perſons who are liable to general inflammatory complaints, thoſe of a paſſionate diſpoſition, and thoſe addicted to deep ſtudy, are obſerved to be principally ſubject

to phrenzy; it is evident that the predisponent cause is some morbid state of the vessels within the cranium.

Exciting Causes. Every circumstance which tends to increase the action of the vessels within the head has been regarded as an exciting cause of phrenitis *. Such are, intoxication from the immoderate use of fermented liquors; blows on the cranium; and the exposure of the head for a considerable time to the influence of the solar rays. The operation of these causes needs no explanation. The process of parturition, when difficult, acts in the same way. The suppression of habitual evacuations is also an exciting cause.

In inflammatory affections of the parts within the thorax, the blood being prevented from passing readily through the lungs, cannot be returned as usual from the veins of the head; while, at the same time, the action of the arterial system is increased †: hence the cause of the frequent termination of peripneumony in phrenitis is obvious.

REMARKS on the Cases of Phrenitis.

The first case illustrates the explanation offered respecting the cause of the termination of inflammatory

* Vide Dr. Cullen's First Lines, par. 294.

† Vide Van Swieten Comment. in Aphorism. Boerhaavi, No. CCLXXII.

matory complaints of the thorax in phrenitis; for the blood ſeemed accumulated in the jugulars, as well as in the veins within the cranium. It is to be obſerved that, in this caſe, if the relation of MORGAGNI can be credited, (and his general accuracy and fidelity cannot be doubted), both the arteries and veins within the head were diſtended with blood.

In the ſecond and third caſes, the ſerous fluid on the ſurface of the brain had proceeded from the inflammation of the pia mater.

SECT. II. *CYNANCHE TONSILLARIS;* OR, COMMON INFLAMMATORY SORE THROAT.

THIS diſeaſe* conſiſts of inflammation of the tonſils, the uvula, velum pendulum palati, and mucous membrane lining the fauces, attended with inflammatory fever.

The ſymptoms are different according to the degree and extent of the inflammation; and, therefore, that an accurate deſcription may be given, it is neceſſary to notice three varieties.

* Vid. Dr. Cullen's Firſt Lines, par. 301, et ſeq. Home Princip. Med. p. 121. Quarin de curandis Febribus et Inflam. Comment. p. 223.

1*ſt*, In ordinary caſes one of the tonſils is firſt affected; ſo that deglutition, although painful, is not difficult. By degrees the inflammation extends to the other tonſil, to the uvula, to the velum pendulum palati, and along the membrane of the fauces; and is even communicated to one or both Euſtachian tubes. The febrile ſymptoms are then aggravated. Deglutition is very painful and difficult. Soft ſolids being more eaſily ſwallowed than liquids, the ſaliva is allowed to accumulate in the fauces, and excites a conſtant hawking, attended with a degree of naufea. Pain is felt in the internal ear or ears; ſometimes deafneſs is occaſioned. The voice is hoarſe; and reſpiration is ſomewhat difficult. After ſome days theſe ſymptoms ſubſide; and the inflammation terminates either by reſolution or ſuppuration. In the former caſe, ſalivation in various degrees takes place; and ſometimes ſmall ſloughy ſpots of a white or yellow colour, and circumſcribed form, appear on the tonſils, or even over all the fauces. Theſe often continue for weeks after all the ſymtoms of the diſeaſe have diſappeared. In the latter, ſlight ſhiverings are felt; the ſwallowing becomes leſs difficult, and one or both tonſils when examined, appear no longer of a florid red colour, and exceſſively diſtended as they formerly were; but are ſoft, and white, or yellowiſh, from containing pus. Previous, however, to this change, the

the pain is ſometimes in irritable habits ſo great as to induce convulſions. The abſceſs at laſt burſts; and its contents are either diſcharged into the œſophagus, which is known by a bitter taſte being felt, or are hawked up mixed with a little blood and mucus. In ſome caſes, inſtead of a ſingle abſceſs there is a ſucceſſion of ſmall abſceſſes. Soon after this, the patient regains his former good health. But ſometimes the tonſils remain indurated, and as it were ſcirrhous, and prove exceedingly troubleſome. In ſome caſes, too, the uvula is for many months relaxed, and the tonſils are affected with a ſpongy indolent ſwelling.

2*dly*, In the ſecond variety, the inflammatory ſymptoms both general and local, occur in a much more violent degree. The diſeaſe is uſhered in with ſhivering; then roughneſs of the throat is felt, ſoon ſucceeded by ſwelling and inflammation of the tonſils, uvula, velum pendulum palati, and whole mucous membrane of the fauces, ſo that the paſſage to the noſe from the throat is cloſed up. The root of the tongue, too, is ſwelled and inflamed; and alſo the muſcle that moves the os hyoides. The febrile ſymptoms at the ſame time are violent; the pulſe being often one hundred and forty. Both deglutition and reſpiration are impeded. The countenance of the patient is

ſwelled,

ſwelled, and red; his eyes are ſomewhat inflamed and prominent; and although he moves the jaw with great difficulty, he is forced to keep his mouth as open as poſſible in order to breathe. He complains of pain in the ears and head. Sometimes, at this period of the diſeaſe, epiſtaxis takes place, followed by mitigation of the ſymptoms. In other caſes, the ſame event ſucceeds a ſwelling and redneſs of the ſides of the neck. But moſt generally ſmart rigors ſupervene, and a large abſceſs is formed in one or both tonſils. In ſome rare caſes, the matter being diſcharged into the larynx occaſions ſudden ſuffocation; but it is commonly evacuated into the œſophagus, after which the inflammatory ſymptoms gradually ſubſide.

3*dly*, Inſtead of the inflammation being confined to the fauces, as in the two former ſpecies, it is ſometimes extended downwards amongſt the muſcles of the larynx, and even along the membrane inveſting that canal. Where the muſcles alone are affected, there is a conſtant ſenſe of ſuffocation from the difficulty of opening the glottis; at the ſame time, the voice is ſharp and ſhrill; and great pain is felt in the act of ſwallowing. When the membrane inveſting the larynx is inflamed, there is exceſſive difficulty in breathing and ſpeaking, and the voice is ſtridulous. In this ſpecies of the diſeaſe, the ſymptoms proceed with ſuch

ſuch rapidity, that the patient is within three or four days either relieved by the inflammation terminating in reſolution in ſome places, and in ſuppuration in others; or is carried off by ſuffocation from the diſcharge of matter into the trachea, or from the chink of the glottis being compleatly cloſed up.

In the ſecond and third varieties, phrenitis, or pneumonia, have been known to ſupervene. The diſeaſe very ſeldom terminates in gangrene.

The ſymptoms of inflammatory fever diſtinguiſh in general all the varieties of cynanche tonſillaris from every other ſpecies of ſore throat. In ſome rare caſes, however, this criterion is not ſufficient to diſcriminate it at the beginning from the angina maligna. On ſuch occaſions, the appearance of efflorescence on the ſurface of the body, the previous hiſtory of the patient, and above all the nature of the prevailing epidemic, afford unequivocal marks of the difference of the two ſpecies.

The inflammation in the firſt variety is of a mixed nature; being ſeated in glandular bodies, and in a membrane which, while it partakes of the ſtructure of mucous membranes, and of the cuticle, differs from both in poſſeſſing part of that mechaniſm through which the ſenſe of taſte is conveyed. The tonſils and uvula have therefore the phlegmonic ſpecies of inflammation; while the membrane of the fauces is affected probably with

with the eryſipelatous, altered ſomewhat in its phenomena by the peculiarity of ſtructure of that membrane. The ſloughs ought perhaps to be conſidered either as ſuppurations of the mucous follicles, or of thoſe glandular bodies which ſerve to tranſmit the ſenſe of taſte.

In the ſecond variety, the inflammation ſeems to differ from the former only in degree and extent. It is indeed communicated to the root of the tongue, and the muſcles of the os hyoides; but this only aggravates the ſymptoms.

The inflammation of the third variety, however, is more complicated: for in it, as in the former caſes, not only are the glandular parts, the membrane of the fauces, and the muſcles of the os hyoides, affected; but alſo the membrane lining the larynx, (which is a mucous one) and perhaps the ſubſtances which connect the cartilages of that organ.

CASE OF CYNANCHE TONSILLARIS.

(XLIV. 3.)

A CARPENTER, aged thirty-three years, of a tall ſtature, pretty corpulent, and of a large ſize, having, as far as could be learned, been in good health, returned home one evening during the cold ſea-

ſon very much intoxicated, and greatly heated, both by the wine he had drank and by the fire at which he had ſat. Having become very feveriſh, and being affected with ſore throat, a phyſician was ſent for the ſame evening, and he was bled in the arm. As the diſeaſe nevertheleſs did not abate, he was in the morning brought into the hoſpital at Padua, where veneſection was repeated; but with ſo little effect, that in the evening it was again had recourſe to, a quantity of blood being drawn from his foot. On the morning of the following day, the remedies, both external and internal, which had been already uſed, and which were ſtill employed, having failed to produce any good effect, blood was again drawn from his arm, and at noon from the ſublingual veins. The jugular could not be opened agreeably to the wiſh of the phyſicians, as the patient could not bear the poſture neceſſary for that operation. Notwithſtanding of all theſe means, the ſymptoms of fever and reſtleſsneſs were not only not moderated, but were even increaſed; and at the ſame time they were attended with difficulty of ſwallowing, ſpeaking, and breathing. On the following day, (which was the third of the diſorder) he mentioned that he was affected with virulent gonorrhœa, and that he had been troubled with it for at leaſt a fortnight. A vein in his foot was again opened on that day. The blood which had

hitherto been drawn had never had any cruſt on its ſurface, but was ſomewhat hard, and contained a ſmall proportion of ſerum. His neck was a little ſwelled, but not his face, which was not even red. Within two hours after the laſt veneſection, although the pulſe ſtill continued ſtrong, the patient himſelf was ſenſible of his approaching diſſolution, which actually took place about noon of the ſame day; though it happened in ſuch a manner, that it appeared to the attendants to have been occaſioned by accident: for having called for the gargle which he uſed, and having perhaps put, unguardedly, ſome more of it into his mouth than he intended, he inſtantly expired, as if he had been ſuffocated by the fluid.

Appearances on Diſſection.

Abdomen. Nothing uncommon appeared within the abdominal cavity; except a globular body, placed near the edge of the meſentery, which reſembled very much, in form, in colour, and in ſize, one of the largeſt eggs that project from the ovarium of a boiled hen. This was nothing elſe than fat, of a more yellow colour than the reſt of the fat of the body: it was included within a ſingle membrane, in the form of a ſpherical bladder, having no intervening membranous lamellæ as far as could be obſerved. The ſtate of the urethra was examined, in conſequence of the patient's having confeſſed himſelf affected with gonorrhœa.

norrhœa. The proſtate gland would have appeared larger than ordinary, had not the penis alſo been of a large ſize, as it generally is in a large body. The proſtate, the caruncle, the veſiculæ ſeminales, and every other part within the urethra, except the internal ſurface of that canal, which ſeemed to be ſomewhat more moiſt and more red than uſual, were in a natural ſtate. One of Couper's glands was wanting, a circumſtance not very uncommon: the ſubſtance of the other was changed into a hard, firm, ligamentous-like body.

Thorax. The lungs were neither turgid nor inflamed, but were perfectly ſound. The membranes, however, which inveſt theſe organs, like other membranes in this body, reſiſted the knife more than uſual. The left lobe of the lungs was cloſely connected to the pleura, but the right was perfectly free. The pericardium contained a little red coloured fluid. This was not tinged in conſequence of diſſection; for, as it was congealed by the cold, it plainly appeared to be internally of a red colour. Within the heart, which was uncommonly large, being out of proportion to the body, (and it too was large) neither polypi nor any thing unuſual were found. A ſmall quantity of black blood only, which was neither too fluid nor too much coagulated, was ſeen within it. The aorta, from the valves at its origin quite to the celiac artery, exhibited many marks of diſeaſe; for

here and there a few ſpots, which were not of a bony hardneſs, were perceived on its internal ſurface. Internally, too, except in the ſeat of theſe ſpots, its ſurface was no where whitiſh, but of a red brown colour: neither was it ſmooth and ſhining, as it generally is, but unequal, from ſmall and thin excreſcences, of a red brown colour, both externally and internally, and of various forms and ſizes. The largeſt of theſe might have been covered with a lupin, the form of which it much reſembled. When looked at, they appeared to be of a ſoft conſiſtence; but when cut into, they were found to be as compact and firm as the parietes of the veſſel. This diſeaſed ſtate was much more conſiderable in proportion as the artery approached the heart. But it did not extend, neither to the carotids, nor to the ſubclavians, nor even below the celiacs; under which too the appearance of white ſpots became gradually leſs and leſs. The parietes of the artery were alſo harder than uſual. The fourth ſinus of Valſalva was obviouſly larger than natural, though not in a very great degree. The ſeptum of the auricles of the heart had its ſurface next the pulmonary vein marked with parallel furrows, which were not very ſlight.

Head and Neck. The veſſels of the brain, both externally and internally, and not only within the ventricles, but alſo in different places within

in the medullary ſubſtance, were diſtended with blood. Thoſe veſſels which crept through the left ſide of the pia mater were more particularly diſtended. That membrane, like the other membranes of this body, when cut into, gave more than uſual reſiſtance. The lateral ventricles contained a ſmall quantity of bloody-like fluid. The tongue was thicker than uſual; the veſſels upon its ſuperior ſurface, from the baſis towards its apex, were certainly enlarged in their diameters from the included blood. The uvula and the velum pendulum palati were ſound. The membrane inveſting the tonſils was conſiderably thickened, as it contained a quantity of yellow coloured ſerum which reſembled yellow jelly. The tonſils themſelves were ſwelled, and more eſpecially the left one, which was harder than the other, and from which, when preſſed upon or cut into, ſome pus was expelled. The cartilages and muſcles proper to the larynx were perfectly ſound; but the membrane inveſting that canal was diſeaſed both externally and internally. Internally it was a little redder than uſual, as was alſo the contiguous part of the aſpera arteria. It was ſomewhat ſwelled too, but ſo ſlightly that the chink of the glottis did not appear to be thereby ſtraitened. The ſame membrane, where it covered the epiglottis, both on the concave, convex, and lateral ſurfaces of that organ, was ſwelled, and in ſome parts was of a flo-

rid red colour, in others of a brown red. Theſe appearances were leſs conſpicuous on the concave ſurface than elſewhere, and on it were confined to the third part of its extent. When cut into, they were found to proceed from a collection of blood and ſerum which diſtended the membrane and the contiguous glandular bodies only. On the convex ſurface, theſe fluids ſeemed to have begun in part to be coverted into pus. Beſides, the ſame membrane externally, where it covered the larynx on the back part, together with the glandular bodies enveloped by it, were affected with conſiderable inflammation, eſpecially towards the ſides. On each ſide, the membrane projected in form of a protuberance nearly of the thickneſs of one's little finger. Theſe protuberances proceeding from the neighbourhood of the baſis of the cricoid cartilage, and converging in their aſcent, reached ſomewhat above the arytenoid cartilages. They were totally unconnected with thoſe cartilages, and with the ſuperior part of the larynx, although they adhered to the remaining and inferior part of that canal. Theſe bodies were like two inflamed condylomata, reſembling in form and colour the appearance of the epiglottis already deſcribed, except that they were of a deeper florid red colour, and had leſs of the brown taint. When diſſected, they were found to conſiſt of the membrane and its glands diſtended with effuſed blood and ſerum.

The

The ſwelling was moſt conſiderable on the left ſide, which it has been remarked was the ſide principally affected.

CAUSES OF CYNANCHE TONSILLARIS.

PREDISPONENT CAUSE. Beſides the prediſpoſition to general inflammatory complaints, it appears that ſome local affection of the parts prediſpoſes to inflammation of the throat; for it is obſerved that ſome perſons are wonderfully liable to it. Men it has been alledged are more ſubject to this complaint than women. After the throat has been once inflamed, there exiſts always a great prediſpoſition to a return of the inflammation.

EXCITING CAUSES. The exciting cauſes commonly enumerated are, violent exerciſe of the organs of the voice, and the ſudden or long continued application of cold to the throat, or to ſome other part of the body. Hence the diſeaſe occurs moſt frequently during viciſſitudes from heat to cold in the ſtate of the weather, at which time it is often epidemic. Common inflammatory ſore throat is never communicated by contagion.

REMARKS

REMARKS ON THE CASE OF CYNANCHE TONSILLARIS.

THE preceding case is a well marked example of the third variety of cynanche tonsillaris.

The seat of the disease is so accurately pointed out by the description of the appearances on dissection, that any additional observations are unnecessary.

Considering the state of the vessels within the cranium, it is a very remarkable circumstance that delirium did not take place previous to death.

SECT. III. *PNEUMONIA;* OR, INFLAMMATION OF THE PLEURA AND LUNGS.

INFLAMMATION of the pleura and lungs* is indicated, if along with inflammatory fever there be pain in some part of the thorax attended with cough, and difficulty of breathing. The disease is termed, Pneumonia, or Pleurisy, Peripneumony, Pneumonic Inflammation, &c.

This

* A most accurate description of this disease is contained in Dr. Cullen's First Lines, p. 334. et seq.

This diſeaſe is commonly uſhered in by ſhivering, ſucceeded by the uſual ſymptoms of inflammatory fever; a few hours after which pain in ſome part of the thorax, cough, and difficulty of breathing ſupervene. The patient, at the ſame time, has his face ſwelled and livid, and is exceedingly reſtleſs and anxious. If he have any ſhort ſlumbers, they are interrupted by frightful dreams. The pulſe is generally frequent, full, ſtrong, and hard.

The pain is commonly ſevere and pungent. It is ſeated moſt often in one part, viz. about the middle of the ſixth or ſeventh rib on either ſide. It moſt frequently continues fixed.

The cough is more or leſs violent. It conſtantly aggravates the pain. At the beginning it is ſometimes dry, but moſt generally it is attended with the expectoration of pellucid or frothy mucus.

The breathing is moſt difficult and painful in the act of inſpiration. It is rendered more uneaſy by poſture, particularly when lying on the pained ſide.

Such are the general ſymptoms of the diſeaſe, but a conſiderable variety in this reſpect is obſerved. Thus, in ſome caſes, it ſteals on without being preceded by well marked ſigns of inflammatory fever; there having been no rigors nor exceſſive heat, and the pulſe being ſoft, and

ſmall, inſtead of hard and full. The pain, too, is ſometimes dull inſtead of pungent, or the ſenſation of oppreſſive weight rather than of pain is felt.

Much variety in the ſtate of the ſymptoms is alſo obſerved, even in caſes where the diſeaſe is clearly indicated at the beginning. Sometimes, for example, the pulſe is full and ſoft; at other times ſmall and oppreſſed; the pain extends from its original ſeat to other parts, as from the ſide to the ſcapula, or from the ſternum to the clavicle; and the breathing is moſt eaſy when lying on the pained ſide, or on the back.

After theſe ſymptoms have continued in a greater or leſs degree for ſome days, they are either mitigated or become rapidly much aggravated, or continue ſtationary for a great many days.

In the firſt caſe, hæmorrhagy from the noſe, or from the ſeat of piles takes place; or a profuſe ſweat breaks out over the whole body, or there is a copious expectoration of thick yellow matter tinged with blood, or a very great diſcharge of loaded urine, or, it has been ſaid, a large evacuation of bilious matter by ſtool. Sometimes two or more of theſe critical diſcharges concur, as ſweat and expectoration, or the hæmorrhagy and loaded urine. That fluid has in ſome caſes a white or purulent appearance. Sometimes, too, the ſymptoms

toms are mitigated by an eryſipelatous eruption in an external part of the body.

In the ſecond caſe, no expectoration appears, or it is ſuddenly checked, or only frothy mucus is coughed up. The difficulty of breathing, pain in the thorax, reſtleſsneſs, and anxiety, continue to encreaſe. The features ſink, the pulſe becomes very quick, ſmall, and even intermitting. Delirium ſucceeded by coma, and ſubſultus tendinum ſupervenes. Partial ſweats break forth, followed by coldneſs of the extremities; and death, or ſudden ſuffocation, happens. Sometimes too all theſe ſymptoms are preceded by a temporary remiſſion, which impoſes on the patient and attendants.

In the third caſe, there is only a partial mitigation of the ſymptoms, (or rather there is no increaſe in their violence) until about the fourteenth day, when the pain ceaſes; but the difficulty of breathing and quickneſs of the pulſe continue. Slight ſhiverings, ſucceeded by heat, ſoon after occur; and then the cough is found to be aggravated on the leaſt motion, and the patient cannot lie on that ſide which was formerly free from pain. Great debility and emaciation of the body enſue, which terminate in hectic fever and phthiſis pulmonalis; or, after a great quantity of matter has been diſcharged from the lungs, the patient gradually recovers good health; or, what often happens, he is ſuddenly ſuffocated. There

is alſo in this caſe another variety: for after the fourteenth day, along with difficulty of breathing, increaſed by the ſlighteſt motion and cough, the patient is unable to lie on either ſide; he feels a weighty ſenſation above the diaphragm, and the noiſe of fluid within the cheſt may be heard, or fluctuation even may be felt. Such caſes generally end in ſuffocation.

Pneumonic inflammation occurs moſt commonly during viciſſitudes of the weather from heat to cold, and conſequently is moſt prevalent during ſpring and autumn.

It attacks chiefly thoſe in whom the inflammatory diatheſis is ſtrongly marked. No period of of life after puberty is exempt from it; but it moſt generally occurs between the twentieth and the fortieth year.

The ſeat of this diſeaſe is commonly firſt in the pleura, and from that communicated to the ſubſtance of the lungs. Moſt authors before Dr. Cullen imagined that ſometimes the inflammation was confined to the pleura lining the ribs, and ſometimes it began in the parenchematous ſtructure of the lungs, from whence it was extended to the pleura inveſting thoſe organs. The former of theſe caſes was ſtyled Pleuritis, and was ſaid to be diſtinguiſhed from the latter (which was called Peripneumony) by the pulſe being very hard and tenſe, and the pain acute and pungent. But as this

this diſtinction did not ſeem to Dr. Cullen to be confirmed by the appearances on diſſection, nor to be uſeful for practical purpoſes, he wiſhed it to be laid aſide. If the reaſons urged by him in ſupport of his objection to the old diviſion required any additional weight, the following hiſtories would amply afford it: for there is not a ſingle caſe, amidſt the great number detailed, which can properly be called pleuritis; the lungs having been affected in every inſtance.

When pneumonic inflammation terminates in the firſt way deſcribed, the phenomena clearly ſhew that reſolution had taken place, or that the effuſed fluid had been evacuated.

The appearances on diſſection, where it ends in the ſecond manner, prove that either ſuch a quantity of lymph and ſerum, and ſometimes even blood, had been effuſed, as had choaked up the air cells of the lungs; or that the whole ſubſtance of the lungs had undergone ſuch a change as to be indurated, and to have the cells much ſtraitened, which is occaſioned by a great number of minute veſſels throughout the cellular ſtructure being much diſtended with blood.

The third termination depends upon ſuppuration within the ſubſtance of the lungs, or an exudation into the cavity of the cheſt from the ſurface of the pleura having taken place. In the former caſe, the matter is ſometimes deep-ſeated, and

ſometimes

ſometimes ſuperficial. It is ſometimes coughed up, at other times it is abſorbed into the ſyſtem; but moſt frequently it burſts ſuddenly into the air cells, and ſuffocates the patient. This conſtitutes what is termed Vomica. In the latter caſe, which is named Empyema, the effuſed fluid is in ſome rare inſtances re-abſorbed; but moſt generally it is in ſuch quantity as to oppreſs the lungs, by which the reſpiration is more and more impeded, till at laſt ſuffocation enſues.

From theſe obſervations it is evident that inflammation of the pleura, like that of other organs compoſed of cellular ſtructure and diaphanous membranes, terminates in reſolution, ſuppuration, or exudation, ſingly or combined. But it is to be remarked, that it has alſo a different termination from the inflammation of other parts: for the effuſion which often precedes reſolution as well as ſuppuration ſometimes proves fatal.

In ſome rare caſes, there is an effuſion of pure blood into the thorax, and in others the inflammation ends in gangrene *.

CASES

* The author of theſe remarks did not think it neceſſary to give a more minute detail of pneumonic inflammation, and of the appearances on diſſection, as both are ſo very fully explained in the hiſtories of the following caſes.

CASES of PNEUMONIC INFLAMMATION.

CASE I. (XX. 16.)

AN unmarried woman, aged twenty years, was affected with pain, firſt in the left, and afterwards in the right ſide of the thorax, along with cough. She could not lie upon the right ſide. During the night ſhe became delirious, and was affected with convulſions in ſuch a manner that ſome of her limbs remained contracted. In this ſituation ſhe died.

Appearances on Diſſection.

ABDOMEN. The colon, very much diſtended with air, after having reached the ſtomach, proceeded in a ſtraight line to below the middle of the belly; from whence it was immediately reflected towards the ſuperior part of that cavity, and then followed its natural courſe. The appendicula vermiformis, of the thickneſs of a gooſe quill, and eight inches in length, lay in an oblique direction towards the right kidney. All the other viſcera were in a natural ſtate.

THORAX. The right lobe of the lungs was ſomewhat inflamed, eſpecially at the poſterior part, The left lobe, which everywhere adhered to the pleura lining the ribs and diaphragm, in ſuch a manner

manner that it could not be ſeparated without laceration, was very red. The heart contained no polypous concretion; but in each ventricle black clotted blood was found. It was alſo thick and black in the veſſels, but nevertheleſs it was in a fluid ſtate.

Head. The brain was very ſound, though it contained about its baſis a ſmall quantity of ſerous fluid.

Case II. (xx. 22.)

An old man, of about ſixty years of age, was affected with pain in the right ſide of the thorax. He was alſo feveriſh; and had a cough, attended with expectoration. He lay with moſt eaſe upon his back. The expectoration had become more copious; but on the tenth day, after veneſection had been performed, it was ſuppreſſed. On the eleventh day he died.

Appearances on Diſſection.

Thorax. The left lobe of the lungs, although it adhered everywhere to the pleura, was found. The right lobe, on the contrary, although unconnected with the pleura, was on its poſterior part ſo much inflamed as to reſemble in its ſubſtance ſolid fleſh. Two polypous concretions, nearly ſimilar to each other, one in each ventricle, were found in the heart.

CASE III. (xx. 24.)

A MAN, of about forty years of age, who had long laboured under two herniæ, became affected with a pain in the thorax, and difficult reſpiration. At the beginning of the diſeaſe he lay moſt eaſily on the right ſide, and after that on the left; but he could by no means lie upon the back. He expectorated much matter. He was obliged to hold his neck erect, in order to breathe. On the tenth day he died.

Appearances on Diſſection.

ABDOMEN. The cavity of the tunica vaginalis teſtis was filled with ſerous fluid; and from that coat itſelf ſome drops of ſerum could be preſſed out. This conſtituted, on one ſide, a hydrocele. Upon the other ſide there was a varicoſe production of the veins of the ſcrotum, which repreſented pretty exactly the figure of a chain. Thus what appeared to be herniæ, were in fact a hydrocele and cirſocele.

THORAX. Both lobes of the lungs adhered to the pleura; in ſuch a manner, however, that they could be ſeparated without laceration. At the parts next the back they were inflamed, and much indurated. The pericardium contained no fluid. In the heart three polypous concretions were obſerved. One of theſe was in the left ventricle:

the remaining two were thicker, and of a firmer ſubſtance; and were placed, one in the right ventricle, and the other in the correſponding auricle.

Case IV. (xx. 26.)

A man, aged fifty years, who had from his birth been of a browniſh complexion and atrabilious temperament, and who had been much addicted to venery, became affected with difficult reſpiration, like what is occaſioned by catarrh. His diſeaſe having gradually increaſed in violence, he was in about a month compelled to confine himſelf to bed. His voice was ſhrill and loud. He had a copious expectoration of watery matter. His reſpiration was exceedingly difficult, attended with a ſenſe of ſtrangulation in the throat; and he lay with great difficulty on either ſide, but with moſt difficulty on the left, his breathing being then more uneaſy. His reſpiration at laſt became panting; nor could he breathe unleſs his neck was erect. In the progreſs of the diſeaſe the copious watery expectoration was changed into a ſmall quantity of thick, viſcid, ſtinking matter, and his reſpiration grew eaſier; but the ſenſe of ſuffocation ſtill remained. The fever was always ſlight. At length he died.

Appearances

Appearances on Diſſection.

ABDOMEN. The ſpleen was found everywhere connected to the neighbouring parts by intervening membranes: its arteries were in a cartilaginous ſtate. In the right ſide of the ſcrotum a hydrocele was obſerved. This was occaſioned by a quantity of watery fluid which was collected between the tunica albuginea and the teſtis. When that membrane was compreſſed, eſpecially at the ſide of the large blood-veſſels, ſome limpid drops of fluid flowed out. When this fluid was expoſed to a ſtrong heat, it became coagulated into a very white ſubſtance: when placed over a gentle fire, it was gradually evaporated, and left behind it marks of lymph.

THORAX. The right lobe of the lungs differed little from its natural ſtate. The left adhered at every point to the pleura: its ſubſtance was indurated and inflamed. In each ventricle of the heart a polypous concretion was ſeen; and, contrary to the obſervation of Valſalva, that in the left ventricle was the largeſt. It was not allowed to examine the fauces, where perhaps the principal diſeaſe lay.

CASE V. (XX. 55.)

A MAN, aged forty years, of a lean habit of body, who had begun nearly two years before to

complain of a pain, more or leſs violent at different times, about his ſtomach, together with hardneſs at that part, ſometimes attended with a ſimple diarrhœa; and who had lately been affected with a ſlow continued fever, which laſted for ſix or ſeven months, and reduced him much, was ſeized with an acute pricking pain in the left part of the thorax. He lay with great difficulty on that ſide, though he could eaſily lie on the other. He had cough, and at the beginning a little expectoration. The expectoration having ceaſed, he died on the tenth day after the firſt attack of the pain in the thorax.

Appearances on Diſſection.

Thorax. The ſuperior portion of the left lobe of the lungs had entirely degenerated into a hard tumor, compreſſing on all ſides the neighbouring parts, and connected with the pleura in ſome places by ſmall filaments. The pleura itſelf was inflamed. The right lobe, although it adhered ſo ſtrongly to the pleura that it could ſcarcely be ſeparated without laceration, was perfectly ſound. A moderate quantity of watery fluid was found within the pericardium. The ventricles of the heart contained polypous concretions. That in the left, which was very ſmall, extended into the aorta; that in the right, which was larger, was continued into the pulmonary artery.

Case

Case VI. (xxi. 4.)

An old man, ſeventy four years of age, of a low ſtature of body, who uſed to go about victualling houſes; after having been for ſeveral years ſubject to inflammation of the lungs, at laſt died in the hoſpital of Padua, on the eighth day, of a diſeaſe of that kind. The particular ſymptoms of the caſe could not be accurately learned; but there was no doubt that no mark of diſeaſed heart, ſuch as deliquia, palpitations, or irregularities of the pulſe, had been obſerved.

Appearances on Diſſection.

Thorax. The lungs were univerſally connected with the pleura. The upper part of the right lobe was indurated, and of a blackiſh colour. The ſanguiferous veſſels of the ſame lobe were very cloſely connected with the bronchia; and one of theſe veſſels was much dilated to the extent of ſome fingers breadth, after which it became of its ordinary ſize. The trunk of the bronchial artery, where it ariſes from the aorta, was nearly three times larger than uſual. A tubercle, of the ſize and form of an ordinary cherry, appeared on the poſterior part of the left ventricle of the heart, at the diſtance of two fingers breadth from the apex. One half of this tubercle projected above the ſurface, and the other half was buried within the ſubſtance

ſubſtance of the heart. It reſembled one of thoſe hydatids which are ſeen in other organs, as the lungs or kidneys, and are ſo placed as to jut outwards. When punctured with the knife, it diſcharged a little watery fluid, but a more turbid fluid remained. When the tubercle was fully opened, this was forced out along with a ſmall membrane, in which there were ſome white mucous ſubſtances, together with a particle of a tendinous hardneſs. This ſmall membrane ſeemed to ſerve as the inner coat of the tubercle; for, externally another coat, which was thick and white, and rough and unequal on the inſide, ſurrounded it entirely. This coat was quite ſound, as were alſo the parts adjoining to the tubercle. The left auricle of the heart was much longer than uſual. On the internal ſurface of the aorta, eſpecially at its arch, and near the heart, numerous bony valves were obſerved; but, behind the ſemilunar valves the beginnings only of ſuch ſcales appeared. Some more of theſe ſcales were ſeen in other parts of that veſſel, even as far as the origin of the cœliac.

Case VII. (lxx. 10.)

An old woman having been affected with inflammation of the lungs, together with diarrhœa, died.

Appearances on Diſſection.

Abdomen. Each ovarium, and more eſpecially

ly the right one, was of a white colour, and very much enlarged; and appeared of a knotty texture, from tubercles or hydatids, ſome of which were larger than the others, and were filled with watery fluid, which ſpouted out from them when they were cut into. The Fallopian tubes were totally unconnected with the ovaria, and were in a natural ſtate. The internal ſurface of the fundus uteri was of a red colour, inclining to black, in conſequence of blood which lay under it in ſeveral places. When the uterus was externally preſſed upon, in order to force out that blood, the internal ſurface was found to be ſo flaccid that it was torn. When the poſterior crural nerve was ſeparated into two portions, in a longitudinal direction, which was done by the finger alone, a veſſel of the diameter of the twelfth part of an inch, filled with blood, appeared amongſt its fibres, almoſt in a direction parallel to them, ſituated near the axis of the nerve. The internal coat of the urethra was quite black, from its veſſels (which lay longitudinally on it, and parallel to each other) being much diſtended. This blackneſs became greater towards the meatus; that part was flabby, and allowed a relaxed portion of the internal membrane to be prolapſed without it on the right ſide. The bladder was in a ſound ſtate: the two protuberating bodies which proceed from

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the ureters, appeared meeting nearly at an angle, at the diſtance of a finger's breadth from the orifice of the bladder. No mark of the roundiſh body, called uvula, could be diſtinguiſhed, neither about the orifice of the bladder, nor in the ſpace between it and the inſertion of the ureters, nor in the contiguous part of the urethra.

Thorax. The inferior lobe of the lungs, on the right ſide, which was very large and heavy, adhered ſtrongly to the pleura. When cut into, its ſubſtance was found to reſemble that of a boiled liver. The heart was very large in proportion to the ſtature of the woman, which was of a moderate ſize. This was not owing to the thinneſs or extenſion of its parietes, for they were of the ordinary thickneſs, or rather were thicker than uſual. The columnæ, as well as the faſciculi of the ventricles, and the faſciculi of the auricles, were uncommonly thick. The orifices of the coronary arteries exceeded the ſixth part of an inch in diameter; and the artery which lay next them on one ſide, called arteria adipoſa, had alſo an orifice which was not very ſmall. Within the left auricle, beſides ſeveral moderate ſized mouths of veſſels, one as large as that of the coronary arteries juſt ſtated, appeared open. On cutting into the veſſel to which it belonged, it was obſerved that two or three ſmall veins returning the blood from the parietes of the auricle, ran into it.

The ventricles were full of polypous concretions. The aorta on the right ſide, where it begins to deſcend, had its internal ſurface unequal, as it projected inwardly, and contained between its coats a ſubſtance of a bony hardneſs, which might have been covered by the nail of one's thumb. Below the two upper pair of the inferior intercoſtal arteries, inſtead of the three ſucceſſive pairs which ſhould have appeared, a ſingle veſſel was at each of the places ſent off from the middle of the aorta. Theſe were neither of a larger ſize than uſual, nor were they immediately divided into two branches, which commonly is the caſe, when one veſſel is ſent off inſtead of a pair; for each extended as a ſingle trunk for the ſpace of a finger's breadth at leaſt. The diaphragm had inſtead of one foramen, for allowing the tranſmiſſion of the vena cava, two foramina divided from each other by a thin partition.

CASE VIII. (XXI. 35.)

A MAN, of a middle age, and healthy habit of body, rather lean than fat, by trade a ſtone-cutter, having been affected firſt with fever, and immediately after with acute pricking pain in the left ſide, and ſuch a looſe ſtate of the bowels that he had within twenty-four hours eight fluid ſtools, which were not of a yellowiſh colour, nor diſcharg-

ed with any uneaſineſs, ſucceeded by an oppreſſive pain in the thorax, was on the fifth day of the diſeaſe brought into the hoſpital of Bologna, having had no aſſiſtance while in his own houſe. He was bled; and the blood drawn was exceedingly thick, but exhibited no buffy cruſt. Along with the ſymptoms already enumerated, which continued to the laſt, he expectorated ſome matter tinged with blood, but the expectoration was not of long duration. At length, on the eleventh day, he grew confuſed in his mind, and ſomewhat delirious, and his pulſe, which before had been tenſe and not intermitting, having become imperceptible, he died.

Appearances on Diſſection.

Abdomen. The colon, being ſomewhat diſtended with air, appeared immediately on opening the belly. From the middle of that portion, which is generally extended acroſs the belly, it turned downwards to the umbilicus; from whence it again mounted upwards, but not very high: in other reſpects it was in a natural ſtate. Some parts of the ſmall inteſtines appeared as if inflamed. The liver was, both externally and internally, of a pale colour. The gall-bladder was almoſt empty, as it contained but a very few drops of bile, that tinged paper, over which it was ſpread, of a dirty yellow brown colour. The ſpleen was larger and more flabby than uſual.

Thorax.

Thorax. The cheſt contained no fluid. Both lobes of the lungs were on the anterior part turgid, and were there both of a natural colour and conſiſtence; but, on the lower and poſterior ſurface, and in the left ſide on the whole lateral ſurface, they were cloſely connected to the parietes of the thorax. The pleura, wherever the lungs adhered, was unequal in its ſurface: towards the back it was blackiſh, and on the left ſide was thickened, and was of an unnatural colour. The diaphragm, both on its muſcular and tendinous parts to which the lungs had adhered, was of a reddiſh brown colour, and had its blood-veſſels much more diſtinct than common. The lungs were very heavy: they were black on their whole poſterior and lower ſurface, and the blackneſs penetrated their internal ſtructure, which was compact and ſomewhat hardened. On the left ſide a conſiderable portion of their ſubſtance was found to be more indurated and more compact; while on the anterior part, eſpecially on the right ſide, it was of a ſoft thin conſiſtence, and when cut into appeared of a roſe colour. The pericardium contained a little more fluid than uſual. The veſſels on the ſurface of the heart, eſpecially on the flat ſurface, were turgid with blood. Both the vena cava and the right auricle were alſo diſtended with blood. The blood was exceedingly black; and contained no polypous concretions, (and none

appeared, neither in the ventricles of the heart, nor in any of the veſſels) nor almoſt any coagulated ſubſtance of any kind.

Case IX. (xx. 51.)

A young man above twenty years of age, who had previouſly been affected with chronic fever, was ſeized with acute fever, attended with pain of the breaſt, difficulty of breathing, and the expectoration of a ſmall quantity of matter tinged with the colour of blood. During the firſt days of the diſeaſe he lay for the moſt part on his left ſide; and during the latter days he lay conſtantly on that ſide. About the ſixteenth day he died.

Appearances on Diſſection.

Abdomen. The ſpleen was three times larger than uſual.

Thorax. The left lobe of the lungs was ſo much ſwelled, that it filled entirely the cavity in which it was placed. It was univerſally indurated and inflamed, and adhered everywhere to the pleura. That membrane being of a reddiſh colour, exhibited marks of incipient inflammation. The pericardium was not only filled, but alſo much diſtended, with a fluid like cow-milk whey, which had depoſited ſome concretions on the ſurface of the heart. A polypous concretion, of a very ſmall ſize, and very flaccid, was found in each ventricle of the heart: that in the right was the largeſt.

Branches

Branches of theſe polypi extended into the arteries, auricles, and veins: thoſe in the veins were the larger.

Case X. (xxi. 19.)

A butcher, aged ſeventy-eight years, of a tall ſtature and of a ſallow complexion, who at other times had been troubled with the expectoration of bloody matter, had for four days felt an internal acute pricking pain a little below the left breaſt; when he was, on that account, admitted into the hoſpital of Bologna. His pulſe was very irregular, intermitted often, was quick and feeble. He had frequent cough, attended with a ſound nearly reſembling the barking of a dog. The matter which he expectorated was thick, and contained polypous-like ſubſtances of a white colour. His reſpiration was difficult; and he could only lie on his back. Eight ounces of blood were drawn on the day of his admiſſion into the hoſpital, namely, the fifth day of the diſeaſe. A yellow cruſt, two inches deep, of a very firm conſiſtence, and marked with livid ſpots on its external ſurface which was hollow, appeared on the top of the blood. The craſſamentum below the cruſt was melted down into a number of little lumps. It contained no more than a ſingle ſpoonful of ſerum, which was turbid. Blood afterwards was

ſeen

ſeen on the expectorated matter. The ſymptoms not having been in the leaſt alleviated, veneſection was again performed on the ſeventh day. The cruſt of the blood then drawn was thin; the ſerum, which was of a golden colour, was in proper proportion, and the craſſamentum, was of the natural conſiſtence. On the eighth day, the expectoration having become diminiſhed, and the other ſymptoms having continued, he could no longer ſpeak, but turned himſelf on the right ſide, in which ſituation he died in a placid manner, without any ſtertor.

Appearances on Diſſection.

Abdomen. The abdomen was raiſed into a flaccid and ſlightly livid tumour, at the right ileum; this was found to proceed from the colon being at that part much diſtended with air. Another tumour, of a ſmall ſize, appeared in the left groin. It conſiſted of the inguinal gland, which meaſured one inch in thickneſs, one and a half in breadth, and two in length. When cut into, the greateſt part of its ſubſtance had a natural appearance; the remainder, however, was of a whitiſh colour, and ſeemed to conſiſt of ſmall round particles. The ſcrotum was ſwelled on both ſides, but eſpecially on the left; and in the lower part of the right ſide was of a red colour. It contained three ſwellings. The firſt of theſe appeared on the left ſide, at the ſuperior part of the teſticle, and conſiſted of a ſacculus, extending from the cavity of the

the abdomen, and containing nothing but a long fold of the omentum, which was rugous, and could be eaſily drawn forward. Not only the rugous appearance, but alſo the uncommon convolutions of the ileum more eſpecially, and of the colon too in ſome reſpects, obſerved in the belly, clearly proved that this facculus had been at other times diſtended with a prolapſed inteſtine. What conſtituted the other two ſwellings, was a collection of yellow watery fluid within the tunica vaginalis teſtis on each ſide. That coat was thickened. This fluid was ſuppoſed to have been effuſed from a ruptured hydatid; and a ſmall thick veſicle, already almoſt ſolid, and of a fleſhy colour, appending by a peduncle from the tunica albuginea, where it inveſts the body of the teſticle near the large bulb of the epidydimis, ſeemed to form the remains of that hydatid. The veſiculæ ſeminales, and more eſpecially the veſſels which return the blood from them, were larger than uſual; but they appeared to be in an incipient varicoſe ſtate, in conſequence of the ſwellings already deſcribed, rather than to have been enlarged from the ſalacious diſpoſition of the man: for the prepuce, without any mark of previous diſeaſe, was contracted before the glans, juſt as it is in young men who have never had any connection with women.

Thorax. The right lobe of the lungs was every where connected ſtrongly to the pleura, from which

which however it could be eaſily ſeparated without laceration, except at its ſuperior part. At that part it was blended with the pleura, and within its ſubſtance which was of a livid black colour, it contained a number of ſmall round cells, each ſurrounded with its own proper covering, internally ſmooth, and almoſt empty, and having no outlet as far as could be obſerved. Theſe appeared to be the marks of an old diſeaſe. When this part of the lungs was cut into, a ſmell reſembling that of ſour whey, or of the breath of children affected with worms, was perceived. The upper part of the left lobe was not diſeaſed, except that it contained too great a proportion of ſerous fluid. But its lower portion was heavy, red, and indurated like the ſubſtance of the liver. It adhered here and there to the pleura, and in different places was covered with broad white ſubſtances like mucous membranes. The ſurface of the diaphragm next the lobe was covered with a ſimilar membrane, only that it was red, and lay under a little turbid ſerum. Both theſe membranes were readily ſeparated without injuring the ſurface of the lungs or diaphragm. The pleura inveſting the parietes of the thorax and the diaphragm, alſo, was not only of the hardneſs of cartilage or bone, but even conſiſted here and there of thin bony laminæ. From its internal ſurface, and eſpecially at the parts occupied by the bony

laminæ, numerous offeous, tubercular bodies, of a hemiſpherical form, and of the ſize of a vetch, projected. All theſe appearances were more ſtrongly marked on the right, than on the left ſide. In no part was the pleura red or inflamed. Within the pericardium a moderate quantity of reddiſh coloured watery fluid was obſerved. The right ventricle of the heart contained a large ſmooth polypous concretion of a fleſhy colour, extending into the neighbouring auricle; and alſo one of a round form and thicker conſiſtence, which went into the pulmonary artery. A ſimilar polypus was ſeen ſtretching into the aorta from the left ventricle; and a very ſmall one, not unlike an incruſtation, lay in the left auricle. In both ventricles of the heart, and in the aorta, there was alſo ſome black half-coagulated blood.

Case XI. (xxi. 2.)

A woman affected with peripneumony, attended with irregularity of the pulſe, died in the hoſpital of Bologna.

Appearances on Diſſection.

Abdomen. In the gall-bladder, there were two black calculi, of a pretty hard conſiſtence, approaching to the form of a cube, and of an unequal ſize, but neither of them were ſmall.

Thorax. The ſubſtance of the lungs was as

compact as that of the liver. The pericardium contained a large quantity of fluid. The greateſt part of the external ſurface of the heart appeared at firſt ſight to be corroded; but that was not the caſe; for irregular concretions adhering to it formed that appearance. Theſe were readily removed; and then the ſurface of the heart was found quite ſmooth and ſound. To the internal ſurface of the pericardium, other concretions of the ſame nature, but totally unconnected with the former, adhered. It was therefore probable, that all theſe concretions were formed from the fluid contained in the pericardium. Large white polypous concretions, which were not of a very firm conſiſtence, were found in the ventricles of the heart and in the right auricle.

Case XII. (xx. 3.)

A man, aged forty years, who had, on account of a ſlight wound in his leg, been for a conſiderable time in the hoſpital at Bologna, where he had lain in the ſame bed with a man who was carried off by the diſcharge from a large abſceſs in his thigh, became affected with acute fever; attended with cough, the expectoration of matter firſt tinged with blood, and afterwards of a greeniſh colour, difficulty of breathing, and pain in the right ſide. Under theſe ſymptoms, while lying

ing on his right ſide (on which ſide he lay eaſily), he died about the fourteenth day from the beginning of the pneumonic affection.

Appearances on Diſſection.

Thorax. The left lobe of the lungs was found and unconnected with the contiguous parts. The upper lobule and the ſuperior part of the adjoining lobule on the right ſide, were towards the back, ſwelled, inflamed, and much indurated, and adhered cloſely to the pleura by membranous bands. That membrane however, exhibited no marks of inflammation. Each ventricle of the heart contained a polypous concretion of no inconſiderable ſize; that in the right was the largeſt. Although theſe concretions extended not only into the auricles and veins, but alſo into the arteries, they were not continued ſo far within the latter veſſels as within the former.

Case XIII. (xxi. 33.)

A soldier, of a middle age, rather of a lean habit of body, was received into the hoſpital of Padua, in conſequence of being affected with an acute pricking pain on one ſide, together with fever, cough, and difficult reſpiration. Theſe complaints continued for ſome days; and then having become almoſt comatoſe, being affected with ſlight delirium and tremor in his hands, and

his pulſe having at laſt been imperceptible, he died.

Appearances on Diſſection.

Abdomen. The omentum adhered to the beginning of the colon. When it was removed, that inteſtine appeared in a very unuſual ſituation: for, after having reached the liver, which it ſcarcely touched, it extended immediately from thence below the umbilical region, and then was reflected upwards into the left hypochondrium. All that portion was much dilated with air. The pancreas was ſomewhat indurated. The ſpleen was conſiderably larger than uſual, and on that account extended lower down. The liver was alſo large, and over the greateſt part of a white colour, and did not appear quite ſound when cut into, eſpecially on the right ſide. The ductus communis choledochus was wider than uſual.

Thorax. The lungs adhered almoſt everywhere, except at the anterior ſurface, where they were nearly of the natural colour, very cloſely to the pleura. The right lobe was much enlarged, was heavy, and throughout indurated, except in a ſmall portion on the ſuperior part, and on the anterior ſurface. It had a ſmooth and uniform ſurface like that of the liver, and internally it exhibited no reticulated vaſcular appearance, but reſembled the ſubſtance of the liver when boiled. The left lobe, when cut into, appeared ſomewhat harder

harder than uſual, and was of a blackiſh red colour; in other reſpects it was in a natural ſtate. The pleura on the left ſide was colourleſs, or rather whitiſh; but, on almoſt the whole of the right ſide, it appeared of a red colour, obviouſly from inflammation. The cheſt contained no extravaſated fluid. When the lungs were cut off from the aſpera arteria, which in this man was remarkably wide, and furniſhed about its diviſion with larger and more numerous bronchial glands than uſual, a large quantity of bloody frothy watery fluid immediately flowed out from the right lobe of the lungs, and a ſmall quantity alſo from the left. In the pericardium, there was a ſmall quantity of yellow fluid very ſlightly tinged with red. Within both ventricles of the heart white polypous concretions, with black grumous blood everywhere adhering to them, were found. They extended for a conſiderable way into the large veſſels. Similar concretions, reſembling tape-worms, had been found in the iliacs; and ſmaller ones, like aſcarides, appeared on the longitudinal ſinus of the head.

Head. A conſiderable quantity of watery fluid was diſcharged when the cranium was opened. The greateſt part of the veſſels of the pia mater were turgid with blood. When the medullary ſubſtance of the brain was cut into, a great many drops of blood, ſome of them large and ſome of them

them ſmall, appeared here and there. A large quantity of turbid watery fluid was found in the lateral ventricles. On the choroid plexuſes, which were not pale, many veſicles, ſome of them of a pretty large ſize and filled with fluid, were ſeen. The fornix and medulla oblongata were flabby.

Case XIV. (xx. 11.)

An unmarried woman, aged fifty-five years, became affected with pain in the thorax, eſpecially about the ſternum, attended with fever. At the ſame time, ſhe complained of pain in her head, had difficulty of breathing, and expectorated a large quantity of matter. Diarrhœa having ſupervened, all the ſymptoms having been much aggravated, and the difficulty of reſpiration having increaſed to ſuch a degree that ſhe could not breathe but in the erect poſture, ſhe died about the ninth day of the diſeaſe.

Appearances on Diſſection.

Abdomen. The gall-bladder was much diſtended with bile. Both ovaria were greatly indurated.

Thorax. The left lobe of the lungs adhered ſo firmly to the pleura lining the ribs, that it could not be ſeparated without laceration. The right lobe, having adhered to the mediaſtinum in its whole extent, and to the pleura inveſting the

the ſuperior ribs, was torn, in conſequence of its putridity, when an attempt was made to ſeparate it from its connections; and at the ſame time diſcharged, from an abſceſs which it contained, a large quantity of ſanious matter of a pale red colour. The pericardium was filled with ſerous fluid. In the right ventricle of the heart a large polypous concretion, which filled the adjoining auricle, and was extended beyond the orifices of the veins communicating with it, was found. No polypi were obſerved in the left ventricle; but a ſmall one was ſeen at the mouth of the aorta, and an incipient one in the pulmonary vein. The blood, it is to be obſerved, in this body, had loſt its fluidity.

Case XV. (x. 5.)

An old man, aged ſixty-five years, who had two years before been affected with palſy in the right arm, and after having been freed from that diſeaſe had been accuſtomed to complain frequently of a pain in his head, was brought into the hoſpital at Bologna on account of inflammation of the lungs. When admitted, he complained much of a pain and ſenſation of weight in the left ſide of the thorax, and he expectorated purulent matter. The expectoration having ceaſed for many hours,

hours, he ſuddenly died on the twenty-third day of the diſeaſe.

Appearances on Diſſection.

THORAX. The left lobe of the lungs, which was ſwelled and indurated, filled up the whole cavity on that ſide; and contained an ulcer, in which a large quantity of ſanies was collected, and that matter was diffuſed through the whole ſubſtance of that part of the lungs. The pleura was perfectly ſound. In the right ſide of the heart there was a large polypous concretion, which was extended near a foot and a half within the vena cava, and followed the diviſions of that veſſel. In the left ſide of the heart another polypus was ſeen, but it ſcarcely reached the orifice of the aorta.

HEAD. The quantity of half a pint of watery fluid was found within the ventricles of the brain. The glandules of the plexus choroides were turgid. No other preternatural appearance occurred.

CASE XVI. (XXI. 45.)

A MAN, who had been affected with pneumonic inflammation in a very violent degree, was rapidly carried off.

Appearances on Diſſection.

THORAX. The lungs were ſo much ſwelled

that they filled the whole cavity of the thorax. The left lobe, in which ſide the pain had been ſeated, appeared wholly inflamed, and of a black colour; and beſides, towards the lower parts, was ſtuffed up with a whitiſh ichor, like that of an abſceſs. The pleura was everywhere inflamed, livid, and marked with bloody-like points. The intercoſtal muſcles, and particularly the internal ones on the left ſide, were inflamed to ſuch a degree that they appeared bruiſed. Coagula of black blood, not unlike polypous concretions, were found in the ventricles of the heart, and in the contiguous large veſſels, both arteries and veins.

Case XVII. (xx. 9.)

A lady, aged forty-five years, who was very fat, and ſeemed to have a habit abounding with ſerum, in the beginning of the ninth month of pregnancy, after having unguardedly expoſed herſelf to a very cold air, was affected with univerſal ſhivering, ſucceeded by conſiderable heat, great thirſt, difficulty of breathing, very troubleſome cough, a moſt oppreſſive pain in the right ſide of the thorax extending to the ſcapula, and bilious vomiting. At the ſame time, her pulſe was frequent, hard, and quick in the contraction of the artery; and ſhe had great reſtleſsneſs and toſſing of the whole body, a ſymptom which continued

exceedingly troubleſome during the ſucceeding days. The vomiting ſeemed to afford a little relief.

This patient, when in health, had always had difficulty of breathing, eſpecially after motion. She had alſo been often troubled with ſlight cough, attended with copious expectoration; and almoſt every day ſhe had been accuſtomed to vomit in the morning (after having paſſed a reſtleſs night) a thick viſcid matter, after which thoſe complaints ſeemed to be relieved. She had had ſeveral children, and had repeatedly miſcarried.

With a view to relieve the ſymptoms above enumerated, a vein was opened in the right arm; and other reſources of art were had recourſe to. But on the ſucceeding day a more violent attack of the diſeaſe took place. For the pulſe intermitted, though it ſtill continued quick and hard; unleſs ſhe lay with her neck erect, ſhe could not breathe; ſhe expectorated a ſerous livid-coloured fluid, and ſhe paſſed by ſtool a bilious matter. On the third day the difficulty of breathing was ſtill more conſiderable: ſhe became affected with ſtertor; her expectoration was in leſs quantity, and was very viſcid, and of a whitiſh and ſometimes yellowiſh colour; ſhe had frequent ſtools; and her pulſe was ſtill more irregular than it had been. Bleeding was again performed, and other remedies were employed: but in vain. For on the

the fourth day all the ſymptoms were much worſe: The pain of the cheſt, which had been, as was obſerved, dull and heavy, had now become acute, eſpecially when ſhe coughed or moved herſelf; and beſides, a pain in the lower part of the belly, which ſuggeſted the idèa of labour having begun, ſupervened. On the following night, amidſt frequent irregularities and intermiſſions, the pulſe began to flutter, the pains ceaſed, the conſtant reſtleſsneſs of the whole body abated, the expectoration was ſuppreſſed, her ſtrength was exhauſted; and thus, on the beginning of the fifth day, ſhe died.

Appearances on Diſſection.

Abdomen. The belly was opened immediately after death. The uterus was ſomewhat inflamed; and contained a female child, which was already dead. The viſcera of the child, as well as the abdominal viſcera of the woman, were in a natural ſtate.

Thorax. The right lobe of the lungs appeared exceedingly inflamed and indurated, and had in its under portion an incipient abſceſs.

Case XVIII. (xxi. 27.)

A maid ſervant, aged twenty four years, of a good habit of body, and plethoric, who had been every winter ſubject to a violent cough, having

been employed in much hard labour, became affected during the night with fever, uſhered in with rigour followed by heat. Within twenty-fours, pain in one part of the breaſt, together with difficulty of breathing, ſupervened. Along with theſe ſymptoms, ſhe had conſtant tickling cough, and her pulſe was rather hard, and reſiſted the preſſure of the fingers almoſt to the very laſt. In the progreſs of the diſeaſe the pain ſhifted to the oppoſite ſide of the thorax. She felt a ſenſation of weight within the breaſt, and could lie on neither ſide. Blood was drawn, which ſeparated into a greeniſh coloured ſerum, and a craſſamentum with a buffy coat on its ſurface; the part below this was very black, and of a firm conſiſtence. Although blood-letting was performed as ſoon as the pain came on, and although that operation was repeated twice, not only from the arms but alſo from the feet, on the ſame day, and other means of cure commonly employed in ſuch caſes were had recourſe to, ſhe died on the ſeventh day.

Appearances on Diſſection.

Thorax. No fluid was effuſed within the cheſt, nor did the lungs adhere anywhere to the pleura except at the left ſide, and there the connection was neither ſtrong nor extenſive. When the left lobe of the lungs was ſeparated from theſe adheſions, for which purpoſe it was preſſed upon, a conſiderable quantity of turbid ſerum flowed out; but whether

whether from the lobe itſelf, or from the interſtice between it and the pleura, within the limits of the connection, was uncertain, as neither the lungs nor the pleura exhibited the marks of any particular injury at that place; but the lobe was covered, even where there had been no adheſions, with a whitiſh and thickiſh membranous ſubſtance, ſuch as has been often deſcribed in the preceding caſes. A reddiſh coloured ſediment, ſimilar to what ſubſides from water in which freſh meat has been waſhed, adhered to the ſurface of the correſponding pleura. In one part of the ſurface of the lungs, where there had been no adheſion, a kind of tubercle projected, which, when cut into, diſcharged a whitiſh ſerum like pus. The lungs were not only heavy, but were alſo indurated in ſeveral places. When cut into, their ſubſtance, to a great depth, and to a conſiderable extent, was found of a denſe compact ſtructure like that of the liver. In other places, they were almoſt of a red colour, and contained a large quantity of the whitiſh ſerous fluid, ſeen in the tubercle. From theſe appearances, it was evident that death had been occaſioned by the inflammation and ſuppuration of the lungs. In the pericardium ſcarcely any fluid was obſerved. No polypous concretions appeared in the heart. The left ventricle contained ſcarcely any thing, but in the right there was a ſmall quantity of black coagulated blood.

CASE

Case XIX. (xxi. 29.)

A maid ſervant, aged nineteen years, of a plethoric full habit, from expoſure to cold during menſtruation, which for three months had been more ſparing than uſual, was affected with acute pricking pain in the breaſt, attended with difficult reſpiration. The pain was fixed under the left breaſt, and was aggravated when touched, ſo that ſhe could not lie upon that ſide. After having been bled from the arm of the affected ſide, ſhe was brought into the hoſpital of Bologna. At that time the ſymptoms juſt enumerated continued. She lay upon her back. Her pulſe was quick and ſmall, and when preſſed upon by the finger gave little reſiſtance; it was not however irregular. A ſound like that of boiling water ſeemed to iſſue from the aſpera arteria. She had a conſtant hollow tickling cough; her tongue was parched; and her belly was moderately open. Along with theſe ſymptoms, ſhe had at times ſlight delirium. Blood was drawn from the right arm. When examined, after having ſtood for ſix hours, it was found to conſiſt of a very little clear ſerum of a golden colour, and of a yellow cruſt two inches in thickneſs, reſembling rancid fat formed into a circle, the edges of which were in contact with the ſides of the veſſel. When the veſſel was inclined to a ſide this

this cruſt ſeparated into ſeveral laminæ, and the lower part of the blood formed grumous ſubſtances not unlike ſtewed meat. After the veneſection, on the ſame day, a ſmall quantity of blood, or rather a little ſerum ſlightly tinged with blood, was diſcharged from the uterus. All the ſymptoms having become aggravated, the pulſe appearing deeper, as if the artery had retracted inwards, and a frothy fluid reſembling water in which freſh meat had been waſhed having flowed out from the mouth, ſhe died about the beginning of the ſeventh day of the diſeaſe.

Appearances on Diſſection.

Abdomen. When the belly was opened, a ſtrong ſmell like that proceeding from inflamed viſcera, in a ſtate approaching to gangrene was perceived. The liver was of a whitiſh colour. The ſpleen was tinged with a gangrenous blackneſs to a conſiderable extent, but very ſuperficially. The part thus tinged was the inferior portion only, ſo that it did not touch the diaphragm which was perfectly ſound. A very bad ſmell aroſe from the uterus, its appendages, and the contiguous parts towards the back. A ſmall quantity of reddiſh coloured ſerum ſurrounded theſe parts, and they were all externally livid from previous inflammation, which had extended to the lowermoſt part of the rectum, and of the pudendum, as was evident from the redneſs of theſe parts,

parts, the moſt minute veſſels throughout them being as diſtinct as if diſtended with red wax. The inſide of the thighs appeared variegated in an ugly manner, from the woman having been accuſtomed to put a ſmall ſtove under her cloaths during Winter, in order to keep herſelf warm. The ovaria were not ſmaller than the ordinary ſized teſtes of a man. They were ſoft, and contained a great number of veſicles of different ſizes, filled as uſual with a fluid, and ſupplied with ramifications of blood-veſſels, which were very numerous in theſe ovaria. In each of them, there were alſo two ſmall cells; one of theſe contained a minute black body, of a perfectly ſpherical figure, like a dried clot of blood. But in the other, there was nothing, as it conſiſted only of the membrane forming it, which was drawn together, and was of a green, and whitiſh yellow colour. One ovarium, at leaſt, had the appearance of a chink next its ſurface, or at any rate, certainly exhibited marks of former injury. Two clots of blood were found in the vagina about the os tincæ, and blood could be readily forced out from the fundus and cervix uteri. The internal ſurface of the fundus looked at firſt ſight, like the mucous ſubſtance with which it had been covered. The ſituation of the Fallopian tubes, the appearance of the rugæ of the vagina, and of the carunculæ myrtiformes within the hymen, were perfectly natural.

Thorax. The lungs were everywhere connected to the parietes of the thorax, and even to the ſeptum tranſverſum, in ſome places by means of membranous ſubſtances; but in moſt places, and eſpecially at the back and ſides, they adhered by themſelves, their own membrane which was found being united to the pleura. The pleura was only ſomewhat thicker than uſual, and eaſily diviſible into two laminæ. The ſuperior part of the left lobe was completely indurated, reſembled the compact ſubſtance of the liver, and was of a whitiſh colour. The ſubſtance of all the other parts of both lobes, although entirely diſtended with a frothy fluid, was in a natural ſtate. That fluid flowed out when thoſe parts were cut into; and at the ſame time, a purulent-like matter was diſcharged from many of the branches of the bronchia; and from one of theſe, a white ſubſtance not in the leaſt fluid, reſembling a polypous concretion, although perhaps it might have been a ſanguiferous veſſel, was ſqueezed out. In the trunk of the aſpera arteria, and in the larger diviſions of that canal, a whitiſh cineritious matter, formed here and there into concretions, was collected. The tongue was covered with the ſame kind of matter; a whitiſh and ſomewhat thick fluid was preſſed out from the glands lying on the poſterior part of the branches of the trachea; and all the bronchial glands did not ſeem ſound. Between

the lobes of the lungs, in ſome places, thoſe membranous-like ſubſtances, ſo often mentioned in the preceding caſes, appeared. They were in this ſubject ſomewhat thick and hard; but were not, however, true membranes. In the pericardium there was a quantity of reddiſh-coloured watery fluid. The ventricles of the heart contained no blood; but ſome polypous concretions, ſolid for the moſt part, and conſiſting of fleſhy membranes, as it were, and alſo in ſome degree of mucus. Of thoſe which were in the right ventricle, one extended into the adjoining auricle and into the vena cava, and the other, which was round, went into the pulmonary artery and its branches. One only (alſo round) paſſed through the left ventricle; from whence it ſtretched on one ſide into the aorta, and on the other into the left auricle and pulmonary vein. The cellular membranes, which ſurround the trunks of the large veſſels as they go out of the pericardium, ſeemed to be of a mucous conſiſtence, in conſequence of watery fluid being collected within them.

Head. The fauces and the neighbouring parts had begun to ſmell, as if from inflammation. When the cranium was opened, the ſame acid kind of ſmell which proceeds from the mouth of a child affected with worms was perceived. White polypous concretions were ſeen in the great falciform ſinus. The veſſels of the pia mater were

ſomewhat

ſomewhat more turgid than uſual. Between that membrane and the brain, a ſmall quantity of watery fluid was obſerved. The lateral ventricles contained a fluid of the ſame nature, and of a reddiſh colour. The choroid plexuſes were pale, and had a few large hydatids adhering to them. The brain was ſomewhat ſofter than uſual, and the cerebellum much more ſo.

CASE XX. (LXIV. 2.)

A MIDDLE-AGED woman, affected with peripneumony, died in the hoſpital of Bologna.

Appearances on Diſſection.

ABDOMEN. A ſubſtance, of a roundiſh form, of an inch in diameter, of a reddiſh colour, inveſted by a coat peculiar to itſelf, appeared in the adipoſe membrane ſurrounding the left kidney. It was neither the glandula ſuprarenalis, which at that ſide was double, nor a ſupernumerary kidney of a ſmall ſize, nor a lymphatic gland; but ſeemed, from its appearance on diſſection, to be an additional ſmall ſpleen. For, when cut into, its circumference appeared of a bright red colour, as is often obſerved in the ſpleen; in other parts it was of a red brown colour: and although its ſubſtance reſiſted the knife ſomewhat more than the ſpleen does, yet every perſon who ſaw it, at once acknowledged it to be of the ſame nature. The

left kidney was longer than the right; which was not wonderful, ſince it was furniſhed with a double pelvis, one lying above the other, each being quite diſtinct. The ureters, one of which proceeded from each pelvis, opened into the bladder at the uſual part by an orifice proper to each, the one being ſeparated from the other by a ſmall ſpace. The internal ſurface of the fundus uteri was red; and although veſſels were diſtinctly ſeen in the membrane lining it, no blood was diſcharged when the ſubſtance of the uterus was preſſed upon. In the internal ſurface of the aorta, ſmall white ſpots were obſerved, like incipient oſſifications. Within the iliac arteries, parallel lines, in a longitudinal direction, appeared on the internal ſurface, which could not be obliterated even by drawing out the ſides of the veſſel.

Thorax. A great part of one of the lobes of the lungs was ſwelled, indurated, heavy, and internally of a firm compact ſubſtance; which was not only of a pale red colour, like the liver when boiled, ſuch as is often ſeen in inflammation of the lungs, but was alſo of a whitiſh colour, apparently from its containing purulent matter, though it was probably frozen, as intenſe froſt prevailed at the time the body was opened. The cellular membrane of the aſpera arteria, on the poſterior part, was ſo much diſtended with pent-up fluid, that the glands commonly ſeen there could not be

be diſtinguiſhed. The blood returning from the belly paſſed through the diaphragm by two oriſices, contiguous to each other, inſtead of one. In the heart, the orifice of the coronary vein was not furniſhed with a membranous valve; but was cloſed on the right and left ſide with numerous ſlender parallel filaments, reaching from the upper to the lower part, in ſuch a manner, that the blood could paſs between filament and filament, but more readily through the middle of the orifice, where the filaments were almoſt wanting.

Case XXI. (xx. 61.)

A woman above ſixty years of age, who was fat and plethoric, was ſeized with a pain ſituated chiefly in the right ſide of the thorax; together with violent fever, great thirſt, foreneſs and laſſitude over the whole body, and painful breathing. Veneſection was performed, and other means of art employed; but in vain: For the laſſitude increaſed, ſhe became inſenſible, and had low delirium. At length her expectoration, which had hitherto been in moderate quantity and not viſcid, became copious, and had a purulent appearance *. Her reſpiration grew more laborious. Delirium took place; and ſhe died on the eighteenth day of the diſeaſe.

Appearances

* In the original the expreſſion is, "Tandem ſputum, quod antea modicum erat, nec glutinoſum, rotundum ejicitur et purulentum."

Appearances on Diſſection.

THORAX. The right lobe of the lungs adhered to the pleura, and contained within its ſubſtance an abſceſs, round which there was great inflammation, and from which a quantity of purulent matter was diſcharged when the lobe was ſeparated from the pleura. That membrane itſelf, and the left lobe of the lungs, were ſound. In the right ventricle of the heart there was a ſmall polypous concretion; and in the other a ſubſtance of the ſame kind, in an incipient ſtate.

CASE XXII. (XX. 35.)

A YOUNG man, nearly twenty-four years of age, was ſeized with a pricking pain in the left ſide of the thorax; attended with difficulty of breathing, great thirſt, violent cough, with no expectoration. He lay on the affected ſide, and felt leſs uneaſy when his head was low. At length, the difficulty of breathing having every day become greater, he died on the ſixteenth day of the diſeaſe.

Appearances on Diſſection.

THORAX. The left lobe of the lungs was everywhere ſtrongly connected to the neighbouring parts: it was inflamed, and, towards the ſcapula, in a ſtate of ſuppuration. The pericardium was ſo much diſtended with fluid, that it might very juſtly

juſtly be deemed dropſical. Its coats were very much thickened; and certain white concreted ſubſtances adhered in ſome places to its internal ſurface, as well as to the outſide of the heart. The ventricles contained fluid blood, and alſo two polypous concretions; that in the right ventricle being larger than that in the left.

Case XXIII. (xx. 49.)

A woman, aged ſixty years, of a ſlender make and ſanguineous temperament, was ſeized with a violent fever, dry cough, and an acute pricking pain in the left ſide, of ſuch a nature, that when ſhe lay on that ſide it was much alleviated. After blood-letting the pain remitted ſo much, that ſhe could lie eaſily on any ſide. The fever, nevertheleſs, and thirſt, continued. She ſometimes expectorated a thick matter. The difficulty of breathing became aggravated; and at length, on the thirteenth day of the diſeaſe, ſhe died.

Appearances on Diſſection.

Thorax. The right lobe of the lungs was quite unconnected with the pleura. It was of a whitiſh colour, marked with black ſpots, of a firmer conſiſtence than fleſh, and contained ſome tubercles filled with ſanies. The pleura was quite ſound. The left lobe of the lungs adhered to the pleura,

pleura at the ſuperior part, but was much leſs diſeaſed than the right; for it was only covered with black ſpots, and towards the throat, where it was pretty hard, contained a ſmall abſceſs. In the pericardium there was an ounce of ſerous fluid. A large polypous concretion was ſeen in the right ventricle of the heart; the greateſt part of which filled the cavity of the correſponding auricle, from whence it extended into the contiguous veſſels. In the left ventricle there was another polypus, of a ſmaller ſize.

Case XXIV. (xxi. 23.)

A man, aged about forty years, was ſeized with an acute pricking pain in the right ſide, attended with fever and intenſe heat of the body. He was brought into the hoſpital of Bologna, on the beginning of the fourth day of the diſeaſe. He had then a ſmall, quick, and ſomewhat irregular pulſe, and alſo frequent and weak reſpiration. He lay upon his back, appeared drowſy, and his intellects were deranged. He had been bled previous to his admiſſion into the hoſpital. He had paſſed a reſtleſs night, and his reſpiration had become more difficult. On the morning of his admiſſion he breathed with ſtill greater difficulty; and ſtertor having ſupervened, he died about the end of the ſame day.

Appearances on Diſſection.

Abdomen. On the ſmall inteſtines, in a very few places, a ſlight incipient inflammation was obſerved. The liver appeared ſomewhat indurated. It was livid, both on its edge, and alſo to a conſiderable extent on its concave ſurface. In the latter part the livid hue was ſuperficial, but not in the former. The ſpleen was ſo flabby, that it was very readily broken down by the fingers.

Thorax. From the pleura, near the left ſide of the ſpine, three or four tubercles, of a white colour, and of the hardneſs of bone, projected. In other reſpects, that membrane was ſound. The left lobe of the lungs, although it appeared uninjured, diſcharged, wherever cut into, a yellow coloured fluid. The right lobe was greatly enlarged, very heavy, and much indurated; and reſembled the ſubſtance of the liver, except in ſome parts, to a conſiderable extent, where it was of a white colour, and in a ſtate approaching to putrefaction. From it, too, a fluid ſimilar to that in the left lobe, and in greater quantity, flowed out. In all the orifices of the heart, polypous concretions were obſerved. Of theſe, the ſmalleſt was ſituated in the left auricle, and the largeſt in the right; and both were accompanied with grumous blood. The polypi, in the pulmonary artery, and in the aorta, were of an intermediate ſize between theſe two.

HEAD. The veſſels of the pia mater were ſomewhat turgid. Under this membrane, a watery fluid was ſeen; and the ventricles contained a ſmall quantity of reddiſh coloured fluid of the ſame kind. The plexus choroides were neither pale, nor free from hydatids.

CASE XXV. (xx. 56.)

A MAN, about fifty years of age, who had for many years laboured under a leproſy of the right thigh, was affected with ſore throat. After this had continued for two days, it terminated in a particular pain in the back. To this a dry cough, great thirſt, and difficulty of lying on the right ſide, though he could eaſily lie on the left, ſupervened; and, beſides, he felt a certain oppreſſive pain, ſurrounding like a belt the lower part of the thorax. Although, during the latter days of his life, the febrile ſymptoms appeared mitigated; and though no other marks of inflammation of the cheſt than thoſe already enumerated occurred, he died on the ninth day from the time he had been confined to bed.

Appearances on Diſſection.

THORAX. The left cavity of the cheſt was filled with purulent ſerous fluid. A membranous ſubſtance, which was a concretion of this fluid, adhered to the pleura of that ſide, in ſuch a manner

ner as to reſemble a diſeaſe of that membrane. The pleura, which lay under this concreted ſubſtance, was inflamed; as was alſo the caſe, though in a ſlight degree, with the lungs. Some very ſmall polypous concretions lay hid in the large veſſels about the heart.

Case XXVI. (xxi. 24.)

A middle-aged woman, who had miſcarried about the third month of pregnancy, although ſhe had loſt a moderate quantity of blood from the uterus, and had alſo had a vein opened, was on the eighth or tenth day after miſcarriage affected, without any apparent cauſe, with internal inflammation of the cheſt. On this account ſhe was brought into the hoſpital at Bologna. She then complained of pain in the cheſt, and of difficulty of breathing, attended with fever. She lay always on her right ſide, as ſhe could neither lie on her left nor on her back. The pain was internal, ſo that it ſhould not have been increaſed by touching the affected part; ſhe could not, however, deſcribe accurately its ſeat. She had cough; but expectorated nothing, at leaſt nothing which had any reference to the diſeaſe. Deafneſs and pain in the ears ſupervened. As ſhe had been formerly bled from the arm, a vein was now opened in the foot: but theſe and other means proved

ineffectual; for she died about the thirtieth day after miscarriage.

Appearances on Dissection.

Abdomen. The belly was swelled, from the epigastric region downwards; and when the swelling was pressed upon, air was forced out at the mouth. The liver was of a prodigious magnitude, and had forced the stomach, which was distended with air, down into the umbilical region. It was throughout very much indurated, and of a colour which, although it approached to whiteness, was not very different from the natural one. The bile in the gall-bladder was almost black. The spleen was large, but nothing in proportion to the size of the liver. The parietes of the uterus were somewhat thicker than usual, but contained no blood: for, though cut into, and pressed upon by the fingers, not a drop appeared. The internal surface of the fundus was livid. One of the Fallopian tubes had hydatids hanging from its fimbriæ, by which its orifice at that extremity seemed closed up. Each tube contained such a quantity of the white puriform fluid which lubricates their external surface, that, when pressed upon at the extremity next the uterus, the fluid was forced out, and the internal orifice was thereby rendered distinctly visible. Within the middle of one of the lobes, a small body, of a black colour, and of the shape of a grape, was seen. This had a minute stalk attached

tached to it, which ſeemed to be, and probably was a ſmall clot of blood. The ovaria were unequal in their ſurface, and each was marked with a black ſpot. Under theſe ſpots, a minute cyſt, filled with a black globule, lay. In the centre of one of theſe globules, there was another hollow globule, of a ſmaller ſize, and of a mixed black and yellow colour. The remaining parts of the uterus and its appendages had a gangrenous ſmell. A ſmall quantity of reddiſh coloured turbid watery fluid was found within the pelvis.

Thorax. Both ſides of the cheſt contained a little yellowiſh turbid watery fluid, of which there was more in the left than in the right ſide. The lungs adhered almoſt every where to the pleura. When ſeparated, a whitiſh pellicle, eaſily lacerated followed; this was certainly not the membrane of the lungs, for that lay under it and was quite ſound; but whether it belonged to the pleura, as it appeared, or was of the ſame nature with thoſe membranous ſubſtances ſeen in ſimilar caſes interpoſed between the pleura and the lungs, could not be accurately determined. The lungs were inflamed, eſpecially at the poſterior part, and their ſubſtance was thickened, was ſomewhat indurated, and was in ſome places of a blackiſh colour. In the pericardium there was a ſmall quantity of a reddiſh turbid watery fluid. In each ventricle of the heart, polypous concretions of a mucus-

like

like conſiſtence, and of a whitiſh yellow colour were ſeen.

Head. A ſmall mucus-like concretion, like that noticed in the ventricles of the heart, was found in the ſuperior ſinus of the falx. Under the pia mater there was a little watery fluid, but there was ſcarcely any in the ventricles. The brain was not at all flabby; and the choroid plexuſes were in a natural ſtate. The pineal gland was of ſuch a ſize as to equal nearly that of an ordinary grape; and being ſlightly touched with the knife, diſcharged a turbid watery fluid, together with a very ſmall quantity of a yellowiſh mucous matter, after which it decreaſed in ſize. When the ears were examined, the membrana tympani of each was found to be of a black colour, and exceedingly flaccid; and alſo the maſtoid cells adjoining to the tympanum were more moiſt than uſual. In one of the tympana, there was a kind of purulent matter; and in the contiguous part of the occiput on the outſide, eſpecially at the left ſide, all the cells in the integuments were filled with a watery mucous fluid. On each ſide, the parotid gland and meatus auditorius were ſound.

Case XXVII. (xx. 13.)

A butcher, aged fifty years, became affected with

with a pain in the right ſide of the thorax, extending to the middle of the ſternum. He lay on his back, coughed much, and expectorated little. He was obliged to hold his neck erect that he might breathe. On the ſeventh day he died.

Appearances on Diſſection.

Thorax. The right lobe of the lungs adhered ſomewhat to the ſternum, and very cloſely to the mediaſtinum: its ſuperior part was entirely indurated. The left lobe was on its poſterior part of a black colour. On the left ſide alſo, the thoracic cavity contained a ſmall quantity of ſerous fluid. The pericardium was filled with the ſame. In the right ventricle of the heart a polypous concretion was ſeen.

The blood in this body approached nearer to fluidity than to coagulation.

Case XXVIII. (xx. 32.)

An unmarried woman, aged ſixteen years, of a cachectic habit of body, whoſe menſes had been ſuppreſſed for eight months, who had a ſpitting of catarrhous matter, felt difficulty in breathing when walking, and was accuſtomed to complain of a certain ſenſation of heat, and pain in the left ſide of the thorax; was ſuddenly affected with ſuch extreme difficulty of breathing, that ſhe could not poſſibly lie in bed. This was attended with

with the expectoration of matter tinged with blood, with the ſenſation of an oppreſſive weight in the ſeat of the pain, with a hard pulſe, and coldneſs of the extremities. At length, on the fourth day from the beginning of the laborious reſpiration, ſhe expired.

Appearances on Diſſection.

Abdomen. The gall-bladder was very ſmall, its coats were much thickened, and it contained little or no remains of bile.

Thorax. A quantity of limpid ſerous fluid was found in both cavities of the cheſt. This fluid, when ſet at reſt, exhibited the ſame appearances as blood does in a ſimilar ſituation; for in its middle a ſubſtance like jelly appeared, ſeparated from, and ſurrounded by, the reſt of the fluid. When expoſed to heat, it coagulated in the ſame manner as the ſerum of the blood does. The whole left lobe of the lungs was exceedingly indurated. The right ventricle of the heart contained a very large polypous concretion. In the left, there was alſo a ſimilar body, but of a ſmaller ſize.

Case XXIX. (xx. 33.)

An old man, aged ſeventy-four years, became affected with a pain of the right ſide, which was very diſtreſſing, rather from a ſenſe of weight, than

from any other cauſe. It was more uneaſy if he lay upon the oppoſite ſide, and therefore he lay on the right ſide. Along with this pain he had troubleſome cough, accompanied with bloody expectoration, pain in his head, watching, and more eſpecially violent fever, attended with hard, frequent, but not very full pulſe. He died on the third day.

Appearances on Diſſection.

Thorax. The right ſide of the cheſt was completely filled with ſerous fluid. The lobe of the lungs on that ſide, was of a black colour, and was inflamed, indurated, and of a very compact ſubſtance. It was eaſily ſeparable from its external membrane, and towards the ſcapula was connected to the pleura by ſhort membranous bands. The left lobe was ſcarcely injured. In the right ventricle of the heart, a moderate ſized polypous concretion, belonging principally to the correſponding auricle, was obſerved. The left contained a ſmaller one. The former of theſe concretions was continued into the vena cava and pulmonary artery; and the latter extended for a ſhort way into the pulmonary vein, and for a conſiderable length into the aorta. Both concretions were accompanied with coagulated blood.

CASE XXX. (XX. 39.)

A MAN, of about ſixty-ſix years of age, who had long expectorated catarrhous matter, having been expoſed to cold, was ſeized with an acute pricking pain in the left ſide, attended with conſiderable cough, and with fever. From the very beginning of the pain, he expectorated a large quantity of thick yellow matter, marked with ſmall ſtreaks of blood. At length the expectoration having been ſuppreſſed, he died on the ſeventh day.

Appearances on Diſſection.

ABDOMEN. The ſpleen was of a reddiſh colour.

THORAX. A quantity of fluid, like cow-milk whey, was found in the left cavity of the thorax. The correſponding lobe of the lungs was very much indurated, and adhered ſtrongly to the mediaſtinum, and to the pleura inveſting the ribs. The right lobe was connected in the ſame manner to the mediaſtinum and to the pleura lining the diaphragm, and more eſpecially to that under the upper ribs at the fore part. A cancerous ulcer at that place lay concealed within the lobe: this was probably the ſeat of an old diſeaſe. In the left ventricle of the heart, there was a ſmall polypous concretion. The right ventricle contained one, which was much larger, adhering to a quantity of coagulated blood.

Case XXXI. (xx. 30.)

A clergyman, who had juſt entered his twenty-third year, had about three years before been affected with acute fever, attended with a running from the parotid glands. After having recovered from this indiſpoſition, he fell into a double tertian fever, which continued for a long time. When this at length ceaſed, he remained in ſome meaſure emaciated, with a pale countenance; was troubled with difficult reſpiration, and occaſionally diſturbed ſleep; and his urine was almoſt always of a red colour. To theſe ſymptoms, an acute fever at laſt ſupervened; and, on the ſecond day after, a pain in the right ſide, below the falſe ribs, and below the enſiform cartilage, took place. This pain was encreaſed on touching the affected part. On the firſt day of the diſeaſe, vomiting and diarrhœa attended; and he was alſo affected with cough, which was at firſt accompanied with ſome expectoration, but in a very ſhort time became quite dry. As he could not lie on either ſide, he lay on his back. He complained of the ſenſation of intenſe heat towards the right kidney. His pulſe was weak, quick, ſharp, irregular, and intermitting. The diſeaſe having continued to encreaſe in violence, the difficulty of breathing having become every day

more conſiderable, and his pulſe having grown very weak; he died about the end of the ſeventh day.

Appearances on Diſſection.

ABDOMEN. All the viſcera were perfectly ſound, and in a natural ſtate; except the ſpleen, which was four times larger than uſual.

THORAX. The left cavity of the cheſt contained more than two pounds of liquid ſerum. The right cavity was filled with a thicker fluid; ſome part of which had become concreted in ſuch a manner, as to form the appearance of membranous bodies floating through it. The lungs were unconnected with the pleura. The right lobe, although not much encreaſed in ſize, was entirely indurated from previous inflammation. The pericardium contained a great quantity of ſerous fluid, which rendered it much larger than uſual. The right ventricle of the heart was filled with coagulated blood, together with a ſmall polypous concretion. The right auricle, alſo, was much diſtended with coagulated blood; and the left ventricle contained a ſmall quantity of the ſame kind of blood.

CASE XXXII. (XX. 36.)

A YOUNG man, about twenty-two years of age, after having complained of pain in his belly, which had

had ceaſed, was affected with pain in the thorax, attended with difficult reſpiration, cough, and troubleſome thirſt. He lay conſtantly on his face, but in ſuch a manner that he inclined towards the right ſide. He held alſo his head low, as thoſe who have the pericardium diſtended with fluid generally do. All theſe ſymptoms having become aggravated, he died on the ſixteenth day.

Appearances on Diſſection.

THORAX. The left ſide of the cheſt contained a quantity of limpid fluid. The correſponding lobe of the lungs was perfectly ſound, and everywhere unconnected. The right lobe was indurated, and ſtrongly connected with the neighbouring parts, and eſpecially towards the ſcapula, where a fluid like cow-milk whey, containing ſome concretions reſembling the white of a boiled egg, was obſerved. Within the pericardium, which was much diſtended, and occupied a large portion of the thorax, a fluid of the ſame kind, with ſimilar concretions, was found. Theſe concretions adhered to the internal ſurface of the pericardium, and to the outſide of the heart. Two polypous ſubſtances appeared in the ventricles of the heart; that in the right was larger than that in the left.

CASE XXXIII. (XX. 59.)

A WOMAN, aged ſixty-four years, was ſeized with

with a pain in the right ſide of the thorax, in ſuch a manner that ſhe lay with difficulty on that ſide. and could not bear to have the affected part touched. Her reſpiration was frequent. She had a dry cough, and a quick, ſmall, feeble pulſe. On the ſeventh day, a ſweat broke out about the head. On the ninth day, her ſtrength having become quite exhauſted, ſhe died.

Appearances on Diſſection.

THORAX. The right lobe of the lungs appeared to be ſo ſwelled, that it filled the whole cavity on that ſide. It adhered ſlightly to the pleura, by means of a kind of membranous ſubſtance, which was interpoſed. This, however, was in fact, nothing but a concretion from ſerum, ſpread out in ſuch a manner as to reſemble a membrane, and to make the pleura appear corrupted *. The pleura in this caſe was ſound. The ſame lobe at its poſterior part, was indurated and inflamed. The left lobe was connected in ſeveral places to the pleura; but was in other reſpects uninjured. In the pericardium there was a great deal of watery fluid. Within the heart ſeveral polypous concretions were found. In the right auricle, a pretty large one, extending into the vena cava, and in the correſponding ventricle a ſmaller one, continued into

* An appearance of this kind ſeems to have impoſed upon Riverius, when he ſaid he ſaw the pleura corrupted in a caſe of pleuriſy.

to the pulmonary artery, were ſeen. In the left ventricle, there were alſo two polypi of different ſizes, the larger of which ſtretched into the aorta, and the ſmaller into the left auricle.

CASE XXXIV. (XX. 53.)

A MAN-SERVANT, aged fifty-five years, complained of pain in the middle part of his cheſt. He could lie on his back, and alſo in ſome meaſure on his left ſide. He was obliged to have his neck erect that he might breathe. He died on the ſixth day of the diſeaſe.

Appearances on Diſſection.

THORAX. The left lobe of the lungs, on the poſterior part, had become very much indurated, and adhered ſtrongly to the pleura, even where that membrane inveſted the diaphragm. The pleura was ſomewhat reddened. The right lobe was ſound; although a ſmall quantity of ſerous fluid, like pus, was obſerved in that ſide of the thorax. The pericardium contained ſome turbid fluid. In the right ventricle of the heart, together with a polypous concretion, coagulated blood was found. In other parts of the body the blood was in ſome degree fluid.

CASE

Case XXXV. (xx. 47.)

A young man, about twenty-ſix years of age, was ſeized with an acute pricking pain in the right ſide of the thorax, attended with fever and cough, with little expectoration. About the eighth day, delirium, particularly violent during the night, ſupervened. The pain ceaſed; but the difficulty of breathing became aggravated. He could lie eaſily on either ſide. On the tenth day he died.

Appearances on Diſſection.

Thorax. Both lobes of the lungs were much indurated, and were towards the back connected to the pleura; to which alſo the left lobe adhered laterally. A white membranous ſubſtance, like a ſoft flaccid reticulated body, was ſpread over the whole of the pleura and lungs, which in ſome parts were thereby connected together. In both ſides of the cheſt, but more eſpecially in the right, a large quantity of fluid, like cow-milk whey, was found. This fluid did not ſeparate into parts, when ſet at reſt; but, when expoſed to heat, coagulated, like the ſerum of the blood. The pericardium was diſtended with ſerous fluid. A polypous concretion was ſeen in each ventricle of the heart; that in the left was the ſmalleſt.

Case XXXVI. (xlv. 16.)

A middle-aged woman, of a pretty good habit of body, and of a moderate ſtature, having been previouſly affected with catarrh, was ſeized with fever; on which account ſhe was brought into the hoſpital of Bologna. Along with the fever, which was very violent, ſhe had great difficulty of breathing, fluſhed face, a moſt diſtreſſing ſenſation of weight in the thorax, and her pulſe was ſomewhat hard. She was exceedingly anxious to expectorate, but ſhe could not do ſo. Her pulſe became low and intermitting; and her reſpiration ſo difficult, that at laſt ſhe could not lie. She neither complained of uneaſineſs nor acute pain in the back; nor was ſhe ever affected with palpitations of the heart, nor delirium. Every neceſſary means were employed, but in vain; for ſhe died on the fifth day from the beginning of her feveriſh complaint.

Appearances on Diſſection.

Abdomen. The ſpleen was large. The liver was ſo very large, that, filling up the left hypochondrium, as well as the right, it had depreſſed the ſtomach; conſequently a part of the œſophaphagus terminating in that organ, appeared two fingers breadth below the diaphragm. But, except their ſize, nothing uncommon appeared, ei-

ther in the ſpleen or liver. A thick oblong polypous concretion was found within the inferior vena cava. The uterus lay forwards, and was ſomewhat nearer the left than the right ſide. The ovaria were very long and ſlender, of a white colour, and indurated; and were connected to the uterus by thicker ligaments than uſual. The veſſels which run through the broad ligaments into the uterus, were very much diſtended with black blood, and were here and there varicoſe. When an inciſion was made from the upper part of the uterus to the lower part of the vagina, the fundus and cervix uteri were found full of mucus; which was almoſt tranſparent like jelly, tinged with no colour, and thinner than that uſually ſeen about the os uteri, which in this ſubject was not wanting. When the mucus at the ſuperior part was removed, a very minute excreſcence, almoſt of a circular form, and of a reddiſh brown colour, was obſerved to project from the internal ſurface of the fundus; and the thick mucus at the lower part of the uterus having been removed, the inferior part of the cervix appeared of an unequal ſurface, from unuſual ſhort lines, of a red colour, which were placed longitudinally, and projected ſomewhat. The vagina, although it was not deſtitute of rugæ, from the middle downwards, was, in proportion to the ſize of the woman, who was as already mentioned of the middle ſtature, ſomewhat

what longer and broader than it ought to be; and contained a wooden ring peſſary, which was a mark of former prolapſus. This peſſary was of an oval form; and was placed in ſuch a manner, that its longeſt axis correſponded with the length of the vagina, and the ſhorteſt with the breadth; one end of the oval being turned towards the os tincæ, and the other towards the orificium vaginæ. The ſhort diameter was ſo long as to diſtend both ſides of the vagina; which, at the part preſſed upon by the inſtrument, projected into an excreſcence, of the form and ſize of a large almond kernel, of a cartilaginous hardneſs, and of a white colour, except that one of them was livid in the middle. Theſe excreſcences ſeemed to threaten an approaching change, from a ſcirrhous nature into ſomething worſe.

Thorax. The lungs, although turgid, adhered ſtrongly almoſt everywhere to the pleura lining the ribs, eſpecially on the left ſide. From the ſame ſide of the thorax, a ſerous fluid, which would have appeared to be white from an admixture of pus, had there been any veſtige of purulent matter at that part, flowed out in great abundance: for it had been collected in ſuch a quantity, that the diaphragm on that ſide, when looked at from the abdomen, appeared convex inſtead of concave. Part of the ſame kind of matter was included between the left lobe of the lungs and the

pleura inveſting the ribs, nearly about the middle of the dorſal vertebræ, to a great extent. Within that ſpace white concretions, like thick membranes, appeared, adhering both to the lungs and pleura. The lobe was, at that part only, of a harder and more compact ſubſtance than natural. A great part of the pleura on both ſides was of a roſy colour. The pericardium was large, and filled with the ſame kind of fluid found in the cavity of the cheſt: ſo that at firſt ſight it might have been miſtaken for a large open abſceſs, inſtead of the pericardium. When the fluid was diſcharged, the internal ſurface of the pericardium, and the external ſurface of the heart, auricles, and large veſſels, appeared of a pale livid colour, and covered over with a certain white cineritious matter, like plaiſter newly laid on a wall; but which, in fact, was found to conſiſt of polypous concretions, forming a thick flaccid membrane, that could be eaſily ſeparated and readily lacerated. When this preternatural membrane was removed, the parts under it appeared in a natural ſtate, and of a proper colour; except that the pericardium was thickened and ſomewhat red, as if from phlogoſis, for it could not be called inflammation. The heart, which was larger than uſual, contained on both ſides black blood, ſuch as had been ſeen in different parts of this ſubject; and

and beſides, ſome round polypous concretions in the right ventricle and correſponding auricle.

Head. In the medullary ſubſtance of the brain, wherever it was cut into, and on the ſurface of the lateral ventricles, veſſels ſomewhat turgid with blood appeared. The lateral ventricles contained ſome ſerous fluid, of a dirty yellow colour.

Case XXXVII. (xxi. 36.)

A young man, aged twenty-five years, of a complexion rather pale, who had formerly been affected with ſtrumous ſwellings, and alſo, it was ſaid, with lues venerea, having overheated himſelf with running (for he was a footman), was ſeized with rigour and fever, attended with acute pricking pain, which he ſaid he felt almoſt over the whole breaſt properly ſo called, but more eſpecially at the lower parts of the cheſt. His back alſo was pained; and he complained of ſoreneſs over the whole body, aggravated, he alleged, on being touched. He could lie only on his back. His pulſe was quick and ſmall. He had no thirſt; he felt great heat internally; his reſpiration was difficult; and he expectorated a reddiſh fluid matter. On the fourth day of the diſeaſe, he had ſome bilious ſtools. On the eighth day, after having paſſed

a great quantity of urine, he became covered with a clammy ſweat, and expired.

Appearances on Diſſection.

Abdomen. The ſtomach and the inteſtines, eſpecially the colon, appeared much diſtended with air. The lower part of the ſpleen was tinged with a particular blackneſs, to the depth of an inch and an half, juſt as if incipient gangrene had ſupervened. The liver was very large, and of a whitiſh colour. The gall-bladder, along with a little bile of a whitiſh yellow colour, contained more than ſeventy calculous concretions. The largeſt of theſe (of which there were very few) did not exceed the ſize of a bean; and the ſmalleſt were not leſs than a pepper corn. The former were of an oval figure, and were flat on one ſide. The latter were of the form of a cube. Internally they ſeemed compoſed of a kind of minute grains moiſtened with bile. Theſe grains were inveſted all round, by a cruſt, which was at leaſt double, and was moſtly of a greeniſh colour, but in ſome places white. When expoſed to the fire, all of them preſerved the flame when they had once caught it, and now and then emitted ſparks with a noiſe. The right kidney was exceedingly flabby. The trunk of the aorta, both in the belly and in the thorax, as high up as the curvature, was ſmall in proportion to the ſize of the body and the

the other viſcera; all which were of a tolerable bulk.

Thorax. The right ſide of the cheſt contained a turbid ſanious ſerous fluid. Both lobes of the lungs adhered almoſt everywhere to the contiguous parts, and even to the diaphragm. The connections of the left lobe, at the anterior ſurface, were formed by filaments only; the remaining part of the ſame lobe, and the right one too, throughout their whole extent, were not only firmly connected to, but alſo even ſeemed to form the ſame ſubſtance with the contiguous parts, by means of a thick membranous body interpoſed between them and the pleura. This membranous ſubſtance was of a white colour, exceedingly tough; and in ſome places, on the right ſide, was half as thick as one's little finger. On the left ſide, it was much leſs thick and white. On the lungs being forcibly ſeparated from their adheſions, this ſubſtance followed. When ſeparated from the lungs, which could be very readily done, this membrane appeared ſound and entire; inſomuch ſo, that, unleſs the pleura had been obſerved uninjured in its natural ſituation on the left ſide, (through which the adjoining intercoſtal muſcles appeared redder than uſual), it might have been miſtaken for that membrane. On the right ſide, however, another membrane ſimilar to the former (which at that part had been torn off, along with

the lungs), except that it was leſs thick, appeared inſtead of the pleura. When this membrane was drawn off, the intercoſtal muſcles were ſeen under it, of a white colour; ſo that, at this place, it was probable the pleura had become thickened in conſequence of diſeaſe. The pleura, where it covered the ſterno-coſtalis muſcle, which was inflamed, was ſemi-putrid, and eaſily lacerated by the ſlighteſt touch of the finger. The fleſhy part of the diaphragm, all round its middle, where the lungs adhered, ſeemed inflamed. The left lobe of the lungs exhibited in one place a white ſubſtance, compoſed as it were of tartariſated grains. In almoſt all the other parts, it was only indurated, compact, and heavy; and it was leaſt ſo on its anterior ſurface. The right lobe was much harder, more compact, and heavier than the left. In the pericardium there was a little more fluid than uſual; and it had a turbid appearance. A whitiſh, yellow, rather flabby polypous concretion was ſeen in the right ventricle of the heart, extending through both orifices of that cavity. Similar concretions went out at each oriſice of the left ventricle. Thoſe which extended from this ventricle into the pulmonary vein, and from the right into the pulmonary artery, were divided into ramifications reſembling diviſions of theſe veſſels.

CASE

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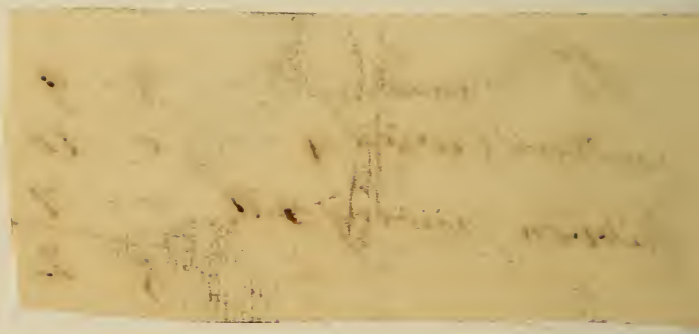

Case XXXVIII. (xxi. 34.)

A man, whoſe trade was that of ſifting wheat, an occupation very injurious to the lungs, after having been affected with pleuriſy, from which he was recovering, became again indiſpoſed. He complained of a violent pain of the thorax; and was compelled, in order to breathe, to ſit up in bed. He had an exceſſive cough, attended with the expectoration of a ſmall quantity of viſcid bloody matter. His face was flushed; his pulſe was hard, exceedingly irregular and intermitting; and he was at times affected with convulſive tremors. He was bled two or three times; the blood drawn had a thick buffy cruſt. His lower extremities became œdematous. Under theſe ſymptoms he died, on the eleventh day.

Appearances on Diſſection.

Abdomen. A conſiderable quantity of turbid yellowiſh watery fluid was found in the belly. The liver was indurated: externally it was of a pale livid colour, and internally it was variegated by numerous red particles.

Thorax. Both ſides of the cheſt, and eſpecially the right one, contained a great quantity of turbid yellow coloured fluid; amidſt which there were concretions, ſimilar to what are ſeen floating at the bottom of a caſk of wine. The

pleura appeared at the ſides, and eſpecially at the left, which was probably the ſeat of the former pleuriſy, to be ſomewhat redder than uſual. The lungs, which adhered nowhere to the pleura, had the lower part of the right lobe indurated and turgid; and at that part the ſubſtance appeared thick, and of a browniſh purple colour. In other parts they were of a ſoft conſiſtence. A bloody fluid was preſſed from the bronchia on both ſides into the trunk of the aſpera arteria. The pericardium, before it was cut into, appeared much larger than uſual. When opened, this was found to be owing not ſo much to a quantity of fluid, of the ſame kind with that in the thorax, which it contained, as to the ſize of the heart; the parietes of which indeed were not enlarged; but its ventricles (eſpecially the right one) were greatly diſtended, and filled with a large quantity of black blood. The blood certainly was not very fluid; but no polypous concretions appeared in the heart, except a ſingle thin incruſtation in the right ventricle.

CASE XXXIX. (xx. 7.)

A WOMAN, aged twenty-ſeven years, who though ſhe had been married for four years, had never conceived, became affected with pain in the left ſide of the thorax, together with difficulty of

breathing, and violent cough, attended with ſome expectoration. Under theſe ſymptoms ſhe died.

Appearances on Diſſection.

Abdomen. The fluid of the veſicles of the ovaria appeared coagulated, as if it had been boiled.

Thorax. In the left cavity of the cheſt, a quantity of white coloured ſerous fluid was found; and the poſterior part of the lungs in the ſame cavity was inflamed. When cut into, although no abſceſs could be diſtinguiſhed, ſanious matter mixed with blood flowed out, and black ſpots were ſeen here and there throughout its ſubſtance.

Case XL. (xx. 20.)

A priest, nearly thirty years of age, was affected with difficult reſpiration, and expectorated a large quantity of matter. At firſt he complained of pain in the right, and then in the left ſide of the thorax. He died on the tenth day.

Appearances on Diſſection.

Thorax. Both cavities of the cheſt contained ſerous fluid, but not in conſiderable quantity. A part of this fluid had become concreted; and, like a pale coloured coat, covered every where the ſurface of the lungs. The right lobe was exceedingly red at the poſterior part; it was alſo indu-

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rated, but leſs ſo than it generally is in caſes of peripneumony. About the middle of its internal ſubſtance, purulent matter had begun to be formed. The left lobe exhibited likewiſe marks of incipient inflammation on the back part. The pericardium was thicker than uſual, and was diſtended with a yellow coloured ſerous fluid. In conſequence of the concretion of a part of this fluid, a reticulated kind of ſubſtance was extended, not only over the internal ſurface of the pericardium, but alſo over the external ſurface of the heart. When this ſubſtance was preſſed upon, ſmall drops of ſerum flowed out. The right ventricle of the heart contained a polypous concretion.

Case XLI. (xx. 2.)

A carman, aged about fifty years, had been troubled with feveriſh fits for the ſpace of a year, and more lately alſo, had been affected with peripneumony, dry cough, difficult reſpiration, and in ſome degree, delirium. He could not, nevertheleſs, be perſuaded to confine himſelf to bed, but applied to buſineſs as uſual. It was not, therefore, till about the fifth or ſixth day from the firſt attack of peripneumony, that he came to the hoſpital of Bologna, to which he walked. After his admiſſion, the above mentioned ſymptoms became

came ſo much aggravated, that he died within twenty-four hours.

Appearances on Diſſection.

Abdomen. A ſmall quantity of limpid watery ſerum was found in the cavity of the belly. The ſpleen appeared three times larger than ordinary.

Thorax. The right cavity of the thorax contained ſome ounces of turbid ſerous fluid. The ſuperior lobe of the lungs, on that ſide, was entirely inflamed, eſpecially towards the poſterior part. When cut into, very ſmall abſceſſes, containing ſanious matter, were found everywhere diſperſed here and there throughout its ſubſtance. The pleura was found. The cavity of the pericardium was half filled with its own proper fluid. Polypous concretions were found in the heart. Thoſe in the auricles were the larger: thoſe in the ventricles, at the orifices of the arteries, were the ſmaller; and of them the largeſt was ſituated in the right ventricle.

Case XLII. (xxi. 17.)

An old man, above ſixty years of age, became affected with fever, and at the ſame time with an acute pricking pain in the anterior part of the right ſide. He lay upon his back. His tongue was parched, and his pulſe full and frequent. After having been treated for ſome days in the ordinary manner,

manner, in the hoſpital of Bologna, he ſeemed to be ſo much relieved of fever and pain, that the ſenior phyſician allowed him to indulge freely in the common diet of the houſe; and three days after ordered him a purge, according to cuſtom. Having, in conſequence of this permiſſion, eaten a great deal, the fever and pain of the ſame part returned on the ſucceeding night. His pulſe became hard, frequent, full, and vibrating; and continued ſo till within a few hours of his death. His reſpiration was hurried; but was not very bad. Having ſpontaneouſly raiſed himſelf into the ſitting poſture, although he appeared as if he ſhould live for ſome days, he was ſuddenly affected with ſtertor, and died.

Appearances on Diſſection.

EXTERNALLY. His body had an ugly appearance. It was much emaciated; the thighs were ſcabby; and the abdomen had fallen in.

ABDOMEN. That particular kind of ſmell which generally ariſes from inflamed inteſtines, was perceived on opening the belly; and, accordingly, conſiderable portions of the ſmall inteſtines were in different places found to be of a very red colour. The edge of the liver, and its hollow ſurface on the contiguous part, to a ſmall extent, was of a livid colour. The gall bladder had tinged the pylorus and duodenum very deeply; but the colour did not penetrate their coats. The flat

ſurface

ſurface of the ſpleen was very black. The pancreas was a little indurated.

Thorax. The upper part of the right lobe of the lungs was enlarged, and appeared to be much indurated. When cut into, pus, or matter reſembling it, together with a frothy fluid, were diſcharged; and its ſubſtance reſembled part of the liver. A ſmall quantity of greeniſh yellow coloured fluid was found in the left ſide of the thorax. The left lobe adhered to the pleura towards the diaphragm, and more cloſely on the upper ſide, through the interpoſition of a yellow thin membranous ſubſtance. The inferior part of the ſame lobe was black and indurated, and was of the ſame ſubſtance as that of the right; and like it, too, contained purulent matter of a whitiſh colour, which was diſcharged when the lobe was drawn out of the thorax. The pleura was quite ſound. In the pericardium there was a large quantity of greeniſh yellow coloured watery fluid. Polypous concretions were ſeen at each of the orifices of the heart; the ſmalleſt extended into the left auricle, and the largeſt into the aorta. That veſſel was much wider than uſual, but had no inequalities. Points of incipient oſſifications were ſeen upon its internal ſurface beyond the valves.

Case

CASE XLIII. (XXI. 30.)

A MAN, aged fifty-ſix years, of a tall ſtature, and of a pretty good habit of body, but irregular in his mode of living, having undergone much fatigue in ringing church bells, (the means by which he gained his bread) had complained for ſome days of a ſlight pricking pain within the breaſt, at the lower part of the ſternum. The pain became much more violent; and upon the ſame day, fever and difficulty of breathing ſupervened. He had two or three ſpontaneous ſtools, conſiſting of a bilious frothy matter. He was brought into the hoſpital of Bologna ſo late, that he could not be bled till about the end of the fourth day of the fever. The blood contained little ſerum, and had a whitiſh yellow cruſt of about two inches in thickneſs. On the fifth day his pulſe was full and hard: he had ſcarcely ſlept during the night; and he could not breathe freely. The urine which he paſſed during the end of the fifth day was of a deep colour, and not very clear. His pulſe, at the ſame time, was frequent, irregular, and not hard. His reſpiration was difficult, and attended with moaning. The pain was unabated; he could lie eaſily on either ſide; and he expectorated a thick frothy matter with yellow ſtreaks. During the night he was much

much diſtreſſed with the pain and cough. In the morning the pain was alleviated: but his pulſe and expectoration were as on the preceding day; as was alſo his urine, except that it was paſſed in ſmall quantity, and was of a reddiſh colour, and ſomewhat turbid. Towards the end of that day, which was the ſixth of the diſeaſe, blood was drawn from his right hand; but as it was all received into water, it could not be properly examined. On the beginning of the ſeventh day he ſeemed better; but towards the end of the ſame day, his pain became aggravated, his pulſe ſmaller and more frequent, his reſpiration hurried, and his tongue parched. He paſſed a reſtleſs night. In the beginning of the ſucceeding day he had profuſe ſweat, which was encouraged by gentle means; but without producing any relief. Towards the end of that day, his breathing was very much hurried; his pulſe ſmall, affording little reſiſtance to the finger when preſſed. He expectorated a yellow matter, which was fluid, and not frothy; and his urine continued to have the ſame appearances. About the beginning of the ninth day, he could at pleaſure put his arms without the bed-cloaths; and could alſo ſpeak, though with ſome difficulty. From theſe circumſtances, thoſe about him did not imagine that he was dying; yet he ſoon after expired.

Appearances on Diſſection.

Abdomen. Externally the belly was livid about the ilia; and under that part the colon, which was diſtended with air, though in every other reſpect ſound, lay. The liver extended ſo much acroſs the body, that it covered the whole upper part of the ſpleen, to which it was cloſely connected. Its edge was for a conſiderable ſpace livid; as was alſo its concave ſurface, to the extent of three fingers breadth: but the lividneſs was quite ſuperficial. It was not harder than uſual, but was a little whiter. The gall-bladder contained very little bile; though the antrum pylori, which lay under it, was tinged with that fluid. It had in it, however, twenty gall-ſtones, of various ſizes, but moſt of them ſmall; except one, which was very large, and which, like the reſt, reſembled charcoal in colour, in roughneſs, and in brittleneſs of ſubſtance. None of theſe gall-ſtones, when expoſed to the fire, emitted flame or ſparks; but they ſometimes crackled a little. The ſpleen was large, even in proportion to the ſtature of the man: it was flabby, and externally of a whitiſh colour. The external ſurface of the ſtomach, on the whole of the left ſide, was marked with large, and as it were, ramifying ſpots, of a blackiſh livid colour. On the internal ſurface, too, ſimilar ſpots appeared, extending to the œſophagus; and about them drops of blood, ſticking between

between the coats and the ſtomach, were ſeen: ſo that, from every circumſtance, there could be no doubt of the ſtomach having been inflamed.

Thorax. Each ſide of the cheſt contained watery fluid; and that on the right ſide at leaſt was turbid and of a yellow colour. Both lobes of the lungs were at the upper part connected to the pleura; which, there, and in ſome other parts of the right ſide, was conſiderably thickened. On the ſame ſide, pieces apparently of that membrane lay on the ſurface of the lungs, which was in other reſpects ſound. The right lobe of the lungs was very heavy, and its ſubſtance throughout reſembled that of the liver: it was of a whitiſh colour, and indurated, but leſs ſo than uſual under the ſame circumſtances. It appeared ſemiputrid; and more eſpecially, as a whitiſh turbid fluid was in many places diſcharged from the bronchia when cut into. Over that ſurface of the lungs, contiguous to the mediaſtinum, next the pericardium, and over the mediaſtinum itſelf, a thickiſh reticulated ſubſtance, of a yellowiſh colour, and of a beautiful appearance, was extended. It could be eaſily drawn off: this was alſo the caſe with reſpect to another membranous ſubſtance, of a bloody colour, which was alſo ſpread over the mediaſtinum at the ſame part. No ſuch appearance occurred in the left ſide; and on that ſide the lungs were ſound, or nearly ſo. In the pe-

ricardium there was a good deal of the ſame kind of fluid ſeen in the right ſide of the cheſt. The heart was very large, and exceedingly flaccid. It contained two polypous concretions. The one of which beginning in the right auricle, was from thence extended through the adjoining ventricle into the pulmonary artery. The other, which was ſomewhat thicker, and much larger, filled almoſt the whole of the left ventricle, and from that was continued into the aorta. When it was drawn out of that veſſel, a column of ſtrongly coagulated blood of the length of a ſpan followed. Nor was the blood contained in the veſſels above that, leſs coagulated, as appeared when the neck was cut into. The veſſels of the larynx and pharynx were turgid. The face was of a livid red colour; and the external ear contained a little half-coagulated blood.

CASE XLIV. (XXI. 32.)

A WOMAN, aged forty-five years, affected with an ulcer of long ſtanding in one of her legs, with a dry ſcabby eruption over her whole body, and with a kind of ſlow fever, was admitted into the hoſpital of incurables at Bologna. Previous to her admiſſion, ſhe had drank ſuch a quantity of wine, that ſhe had ſcarcely taſted any thing elſe for three days; in conſequence of which, ſhe was very

very hot and reſtleſs during the firſt night of her reſidence in the hoſpital. Next morning ſhe was better; but her pulſe was frequent, quick, hard, and cord-like, though it did not reſiſt much when preſſed by the fingers, nor yet was it full. In the evening, ſhe again became hot, and had felt an acute pricking pain at the lowermoſt true rib on the left ſide. The pain was aggravated neither by external preſſure, nor by lying upon that ſide. She lay, however, more eaſily on the right ſide; for, when on the left, the cough which in this diſeaſe always attends, was excited. The pain afterwards ceaſed, and did not again recur; ſo that ſhe ſeemed to be ſomewhat better, more eſpecially as the pulſe, though in other reſpects the ſame, had become leſs frequent. But on the fourth day, after a ſhivering fit, ſucceeded by a hot one, ſhe became worſe; and along with her cough, which had hitherto been dry, ſhe expectorated a bloody matter, of a cineritious livid colour, and of a fetid ſmell. She could not breathe unleſs her neck were erect. Her pulſe became ſmaller and weaker, and ſhe expectorated black coloured purulent matter. A ſlight delirium ſupervened. The exacerbations of the fever occurred at a later hour on theſe latter days. In the middle of the ſixth day, ſhe died as if ſhe had been ſuddenly ſuffocated.

Appearances

Appearances on Diſſection.

ABDOMEN. All the viſcera were ſound.

THORAX. Each ſide of the cheſt contained a ſmall quantity of fetid ſerous fluid, of a cineritious colour. The lungs adhered very ſlightly to the pleura. That membrane, on the left ſide, where the lungs had adhered, was in different places rough and unequal, in conſequence of ſmall red coloured tubercles. Adjoining to the left lobe of the lungs, at that part where it is contiguous to the diaphragm, there were two falſe membranes, one of which adhered to the lobe itſelf, and the other to the diaphragm. That lobe was not red, but of a livid colour, and was of a harder conſiſtence than the liver. When cut into, matter like what had been expectorated was found in its internal ſubſtance, and eſpecially in certain ſinuſes, as it were, which contained yellow pus. No hard nor particular coat inveſted thoſe ſinuſes. There was nothing within the aſpera arteria. The other lobe was quite ſound. Small polypous concretions were obſerved in the vena cava and in the pulmonary artery; and a pretty large one in the left auricle.

CASE XLV. (XXI. 3.)

A ROBUST young man, about eighteen years of age,

age, affected with pneumonic inflammation, died within eight days.

Appearances on Diſſection.

Abdomen. Some effuſed ſerous fluid was ſeen in the abdominal cavity. The edge of the liver was livid. The inteſtines were in ſome places of a reddiſh colour, and had a ſtrong ſmell.

Thorax. The right lobe of the lungs adhered ſtrongly everywhere to the neighbouring parts, by means of a thin membranous ſubſtance. The upper part of the ſame lobe was much indurated, and very heavy; its ſubſtance reſembling that of the liver: an appearance which took place in the remaining part of the ſame lobe, and throughout the greateſt part of the left. The left ſide of the thorax contained a large quantity of bloody, black-coloured, watery fluid; and a good deal of ſimilar fluid was found in the pericardium. The right auricle of the heart was very much dilated, probably in conſequence of its having eaſily yielded to a quantity of blood thrown into it during the laſt moments of life. The blood was black and grumous, and ſurrounded a large firm polypous concretion, part of which belonged to the adjoining ventricle. Another ſubſtance, of the ſame kind, but of a round form, appeared in the pulmonary artery. The left ventricle and auricle contained no ſuch ſubſtance; nor had there ever been any blood

blood in them, except it had flowed out during the diſſection.

Case XLVI. (xx. 17.)

A young man, almoſt thirty years of age, after much working, became affected with a ſlight dull pain in the left ſide of the thorax. At the ſame time he was feveriſh, he breathed with difficulty, and had no expectoration. Theſe ſymptoms continued for fourteen days, about the end of which time they ſeemed ſomewhat alleviated. But, on a ſudden, great difficulty of breathing, attended with ſtertor, and the expectoration of a roſy coloured matter, which he ſpit up in great quantity and with no difficulty, ſupervened. He had lain during the whole courſe of the diſeaſe upon his right ſide, and ſometimes upon his back. On the ſeventeenth day, while turning upon the right ſide, he expired.

Appearances on Diſſection.

Thorax. The pleura appeared ſound, and totally unconnected with the lungs. The left lobe of the lungs was univerſally inflamed, except at the ſuperior part. From that part, although ſound, blood flowed in drops at two places; ſo that more than four pounds of that fluid were found ſtagnating in the left ſide of the cheſt. The heart contained two polypous concretions.

Case XLVII. (lviii. 13.)

A butcher, aged about forty years, affected with lues venerea, often intoxicated, and ſo ſubject to diſeaſes of the thorax, that he had been repeatedly in the hoſpital of Padua, on account of ſuch complaints, was again admitted into that hoſpital. He laboured under acute fever; and was troubled with conſtant cough, which was ſo much aggravated three or four times every hour, that he became livid from the exertion. He had alſo purulent expectoration, and a hard chord-like pulſe. Veneſection was twice performed, and the blood at both times had a buffy coat. Having been thus affected for fifteen days, at laſt, within the ſpace of a ſingle day, his ſtrength failed more and more, and he died.

Appearances on Diſſection.

Thorax. The lungs were quite putrid, and had a very offenſive ſmell. The heart was flabby. In one of the valves of the aorta, the Papilla Arantii was much larger than natural. The membranous layers of which the valve is compoſed, at the ſurface, under the above-mentioned papilla, that is, oppoſite to the other valves, were ſeparated from each other to a conſiderable extent, ſo that a probe could be introduced into the opening. The contiguous portion of the trunk of the aorta was

marked internally with white ſpots, and was ſomewhat unequal on its internal ſurface. The aorta, at its arch, was diſtended into an aneuriſm.

Case XLIII. (xx. 43.)

An unmarried woman, of twenty-two years of age, was ſeized with a fixed acute pricking pain in the right ſide, attended with cough, expectoration, difficulty of breathing, and fever. She could lie in no ſituation, but upon the pained ſide. In the progreſs of the diſeaſe, her expectoration became tinged with blood, and one day a large quantity of that fluid was ſpit up. For ſome days before death ſhe was affected with pains about the ilia. On the ninth day, convulſive motions having ſupervened, ſhe died while lying on her left ſide.

Appearances on Diſſection.

Abdomen. Some ſerous fluid was ſeen in the belly. The ſpleen was very large. The greater part of the ſmall inteſtines were inflamed.

Thorax. The right lobe of the lungs was ſtrongly connected to the pleura. Its whole ſubſtance was greatly inflamed, and in one part next the pleura an ulcer was obſerved; between which and the pleura ſome ſerous fluid appeared. The left lobe approached towards a black colour; and was alſo marked here and there with black ſpots. The left ſide of the thorax contained ſome

ſome ounces of ſerous fluid. Two polypous concretions were ſeen in the heart; the ſmaller lay in the left ventricle; and the larger filled the whole of the right auricle, which was very much dilated.

CASE XLIX. (XX. 45.)

A MAN, aged fifty years, was ſeized with an acute fever, laborious reſpiration, pain, extending from the ſternum almoſt to the abdominal muſcles, and moſt diſtreſſing cough, which occaſioned great pain about the left breaſt and falſe ribs. He could lie on neither ſide. He had no expectoration. On the fifth day of the diſeaſe he died.

Appearances on Diſſection.

THORAX. When the ſternum was raiſed, a ſmall quantity of dark-coloured ſerous fluid flowed out from the left ſide of the cheſt. The left lobe of the lungs was much indurated, approached towards a greeniſh colour, and was marked with black ſpots. When cut into, a watery and putrid colluvies, with blood intermixed, was diſcharged. Polypous concretions were found on the ventricles of the heart.

CASE L. (XX. 41.)

A WOMAN, of ſixty years of age, was ſeized with an acute pricking pain in the right ſide of

the thorax, ſo that ſhe could not lie on that ſide. She was troubled with cough, attended with little expectoration. She breathed uneaſily, but not with exceſſive difficulty; and her ſtrength was entirely exhauſted. The pain afterwards became ſo much alleviated, that ſhe could lie eaſily on the affected ſide. Her pulſe however having every day grown weaker, ſhe at length died.

Appearances on Diſſection.

Abdomen. Within the membrane of the ſpleen, an oſſeous body, of a ſpherical form, was found.

Thorax. Both lobes of the lungs adhered to the pleura. The right lobe, which adhered more cloſely than the left, was at the ſuperior part much indurated. In the ſame part an abſceſs was obſerved: this, when cut into, diſcharged a large quantity of dark-coloured ſerous fluid. The contiguous ſubſtance of the lungs was tinged with the ſame colour, and ſeemed in ſome meaſure affected with gangrene. The left lobe, which did not like the right conſiſt of a ſingle portion, but was compoſed of ſeveral lobules, was ſlightly inflamed at the poſterior part, and throughout the whole external ſurface was here and there marked with black ſpots. Much watery fluid was found in the pericardium. Both ventricles of the heart contained a large polypous concretion; that in the right was the largeſt. The blood in this ſubject was almoſt completely coagulated.

CAUSES

CAUSES OF PNEUMONIC INFLAMMATION.

PREDISPONENT CAUSE. There is a natural and acquired prediſpoſition to pneumonic inflammation. Under the former head, may be claſſed the general diſpoſition to inflammatory complaints and ſtraitneſs of the cheſt. Under the latter, certain occupations in life, as the dreſſing of flax, ſifting of wheat, chiſſeling of ſtones, &c. and former inflammatory affections of the lungs.

EXCITING CAUSES. Every circumſtance which is an exciting cauſe of general inflammation, may, in a perſon prediſpoſed to it, induce pneumonia; ſuch as, expoſure to cold, &c. Violent or long continued exertion of the lungs, too, whether in ſpeaking, ſinging, or blowing on muſical inſtruments, is found to be productive of the ſame effect where there is a general inflammatory prediſpoſition; even although no cauſe, directing the inflammation immediately to the lungs, ſhall concur. Cutaneous eruptions alſo, particularly meaſles, often prove exciting cauſes of this diſeaſe.

Beſides the exciting cauſes now enumerated, MORGAGNI has mentioned ſome circumſtances, (Epiſtle xxi. N° 43. & 44.) which ſeem to ſhow, that pneumonia may ariſe from the preſence of worms

worms in the inteſtinal canal. He ſtates particularly, that pneumonic inflammation, attended with worms, was very prevalent at Farneſe in the winter of 1705 *. But as the diſeaſe was not cured

* Dr. Pedratti, who then practiſed at Farneſe, gave MORGAGNI the following account of the ſymptoms which characterized that epidemic. The firſt ſymptom was pain in the ſide, rather obtuſe than acute; at the beginning tolerable, and throughout its courſe ſometimes intermitting. In the mean time, ſigns of worms harbouring in the alimentary canal appeared; and beſides, ſome of thoſe animals were thrown off by vomiting, and ſome of them were ſeen in the fæces. At the ſame time there was violent cough, attended with the expectoration of a white crude matter tinged with ſtreaks of blood. Fever, uſhered in by ſhivering, continuing uniformly without either remiſſion or exacerbation, accompanied theſe ſymptoms. The pulſe was low, ſmall, and unequal. About the fifth, or at the utmoſt the ſeventh day, the diſeaſe, inſtead of being aggravated, ſeemed rather to decreaſe in violence: ſo that the patient appeared in a way of recovery, the pain and cough having ceaſed, and the fever even being much moderated. Soon after this, however, all theſe ſymptoms became more violent than before; with the addition of ſo great a difficulty of breathing, and ſuch proſtration of ſtrength, that death, preceded by burning heat in the internal parts, while the external ſurface of the body was cold, and, what was the moſt certain ſign of approaching diſſolution, univerſally livid, like that of a dead body, took place within forty hours. Vomiting, at the beginning of the diſeaſe, eſpecially when excited by the preparation called Ruland's Water, was found uſeful in robuſt patients. But purging, even by means of freſh drawn almond oil, or by calomel combined with a little myrrh and coralline, did not produce ſuch good effects. For although, by the latter medicine, the worms, which were of the lumbricus ſpecies, were in a wonderful manner expelled; yet immediately after, the ſtools, the pain was aggravated, and the inflammation

cured by the expulſion of the worms, and as the appearances on diſſection in thoſe who died of that diſorder were pretty nearly the ſame as in other caſes; it is more probable that the preſence of the worms was an accidental circumſtance only, than that it could be an exciting cauſe of the diſeaſe.

REMARKS ON THE CASES OF PNEUMONIC INFLAMMATION.

IN theſe caſes, the various degrees of the ſeveral fatal terminations of pneumonic inflammation are very accurately pointed out. Thus, in the firſt ten caſes, inflammation and induration of the ſubſtance of the ſurface of the lungs are exhibited. In the two following ones, the pericardium and pleura inveſting the ribs had alſo been inflamed, and the

flammation ſeemed increaſed. On the other hand, by the uſe of the oil, the expectoration appeared at firſt to be rendered more eaſy; but ſoon afterwards, as if the lungs had been thereby relaxed, the difficulty of breathing became greater, and the death of the patient was accelerated. For theſe reaſons, it was neceſſary to lay aſide the employment of thoſe medicines. Beſides, as blood-letting was found to depreſs the ſtrength, it could not be had recourſe to, except in caſes where the inflammatory ſymptoms were exceedingly urgent, and then a ſmall quantity only was taken away at a time.

the inflammation had there terminated in effuſion. From the fourteenth to the twenty-fourth, both incluſive, the various gradations in effuſions within the ſubſtance of the lungs, from bloody ſerum to perfect pus, are well marked. The ſucceeding caſes as far as the thirty-eighth, are inſtances of empyema exiſting, either ſimply or combined, with exudation from the ſurface of the pericardium. Empyema and vomica were joined in the following eight caſes. The forty-fifth and forty-ſixth, are examples of bloody extravaſations within the thorax; and the four laſt caſes ſeem to ſhew the progreſſive ſtages of gangrene.

The obſervations already offered reſpecting the phenomena of inflammation, render it unneceſſary to introduce any extended remarks in this place.

The hiſtories of the firſt ten caſes prove, that a degree of inflammation in the lungs, which in many other parts could not be productive of much injury to the ſyſtem, occaſions fatal event.

The induration of the ſubſtance of thoſe organs, it has been already alleged, is owing to many of the veſſels diſtributed over the air cells being diſtended with blood: but it is probable that ſome other circumſtance concurs; for in that ſtate their ſubſtance is as compact and heavy as that of the liver, and, like it too, exhibits a ſmooth ſhining ſurface when cut into.

In the firſt caſe, although delirium had taken

place, there was no inflammation within the cranium.

The ſeventeenth caſe affords an inſtance of the general fatality of acute diſeaſes during pregnancy. Under ſuch circumſtances it commonly happens that abortion precedes the fatal event: but this furniſhes an exception to the general rule.

Caſe eighteenth contains the hiſtory of a patient who died from pneumonia, which was in the winter of 1738 epidemic at Padua, eſpecially in ſome convents of nuns. MORGAGNI ſeems to hint that the diſeaſe was deemed contagious: but he aſſerts, as a proof of the contrary, not only that it was not communicated to the attendants of the ſick, but alſo that all who were affected had a previous diſpoſition to pneumonic inflammation.

The twenty-fifth caſe is an example of cynanche terminating in pneumonia.

The ſymptoms of the thirty-firſt caſe reſembled ſo much thoſe of inflammation of the liver, that Valſalva, after conſiderable heſitation, concluded it to be that diſeaſe. He was led to form this concluſion from there being no ſymptoms diſtinctly characteriſing pneumonia, and from the patient conſtantly pointing with his own hand to the region of the liver as the ſeat of the pain. It muſt be allowed that every ſymptom of hepatitis was preſent, except the pain in the clavicle or ſhoulder, which alone in this inſtance might have ſhewn that there

was no inflammation of the liver. At the ſame time caſes of pneumonia may occur, attended even by this ſymptom. Fortunately the practice in both caſes, being nearly the ſame, is not very materially influenced by the diſtinction of the diſeaſes.

In ſeven caſes, viz. the eighth, nineteenth, twenty-fourth, forty-ſecond, forty-third, forty-fifth, and forty-eighth, ſome of the contents of the abdomen were inflamed. Whether this is to be regarded as an accidental circumſtance, or as the conſequence of ſympathy, remains to be determined.

SECT. IV. *HEPATITIS;* OR, INFLAMMATION OF THE LIVER.

HEPATITIS is ſaid to be characteriſed by pain and tenſion in the region of the liver, the pain extending to the right clavicle and top of the ſhoulder; difficulty of lying on the left ſide, breathleſneſs, dry cough, vomiting, hiccup, and ſymptoms of inflammatory fever *.

In

* Vid. Cullen Noſolog. Method. edition quart. vol. ii. p. 113.

In temperate climates this diſeaſe occurs rarely; but the conſequences of inflammation, as ſcirrhous hardneſs, ſuppurations, &c. are often obſerved in the liver after death, when no ſymptom indicating inflammation of that organ had preceded. Such caſes have been termed Chronic Hepatitis: a title which appears exceedingly improper.

The ſymptoms of true hepatitis are different in different caſes.

Sometimes the pain reſembles, both in the ſenſation it communicates, and in its ſeat, that of pneumonia, and, like it too, is increaſed by reſpiration; but it is different in one reſpect, viz. in being aggravated by the touch. In ſuch caſes, the ſeat of the inflammation is found to be on the convex ſurface. In other caſes, the pain is attended with vomiting, great anxiety, and jaundice. Under theſe circumſtances, the concave ſurface of the liver is chiefly affected.

Obſtinate conſtipation is ſaid to attend at the beginning, in many caſes. In others, the fæces paſſed have a white appearance.

This diſeaſe is by no means ſo dangerous as the inflammation of other abdominal viſcera: for it often ceaſes ſpontaneouſly, terminating by a critical diſcharge of urine, ſweat, bilious ſtools, or hæmorrhagy from the noſe or ſeat of the piles.

Where it ends fatally, it ſeldom proves rapidly or ſuddenly fatal; probably never, unleſs where

the inflammation is communicated to the ſtomach or bowels. It moſt generally terminates in ſuppuration and abſceſs, from which the matter is forced into the abdomen or thorax; and hence the patient either becomes hectic, or is ſuddenly ſuffocated.

But even when ſuppuration enſues death is not always the conſequence: for ſometimes the matter is by the biliary ducts conveyed into the inteſtinal canal, and ſo thrown off; ſometimes it is diſcharged by an external opening through the parietes of the abdomen; and ſometimes too it is coughed up from the lungs. Gangrene ſeldom takes place.

The ſeat of the diſeaſe is probably firſt in the external membrane of the liver, from which it is communicated to the parenchymatous ſubſtance. Some authors have ſuppoſed that, in true hepatitis, the inflammation is confined to the former of theſe parts; and in what they have ſtyled the chronic hepatitis, it is excluſively ſeated in the latter *. But this opinion is not confirmed by the appearances on diſſection.

CASE

* See Dr. Cullen's Firſt Lines, par. 415.

CASE of Hepatitis.

(xxxvi. 4.)

An old woman, more than ſixty years of age, had long complained of a pain above the umbilical region, attended with thirſt, cough, and the expectoration of a catarrhous matter. Towards the end of her life her reſpiration was difficult; and a few days before death, her belly became ſuddenly much ſwelled, and her feet œdematous. At length, the pain above the umbilicus having gradually abated, ſhe died.

Appearances on Diſſection.

Abdomen. The belly contained a great quantity of limpid watery fluid. No veſtiges of lymphatics were perceived. The ſpleen was twice the ordinary ſize. The liver was indurated. A congeries of veſicles, from which ſerum was diſcharged when they were ruptured, appeared adhering to one part of the liver. Within its ſubſtance, next the diaphragm, the cavity of an abſceſs, occupying more than one third of the organ, was found. From this the matter had burſt through the diaphragm into the right cavity of the cheſt, which was filled with ſanious matter. The included lobe of the lungs, however, was

found. The gall-bladder was full of ſmooth calculi.

CAUSES OF HEPATITIS.

PREDISPONENT CAUSE. The moſt probable conjecture on this ſubject, is, that the uſe of particular kinds of food prediſpoſes to this diſeaſe.

EXCITING CAUSES. All the general exciting cauſes of inflammation may induce hepatitis. Of this the moſt frequent is external violence, and more eſpecially, it has been obſerved, if that accident have occaſioned fracture of the ſkull. It has been alſo alleged, that certain paſſions of the mind, violent ſummer heats, violent exerciſe, intermittent and remittent fevers, ſolid concretions or collections of fluids in the liver produced by unknown cauſes, and chronic inflammation of that organ, prove exciting cauſes of the diſeaſe *.

REMARKS ON THE CASE OF HEPATITIS.

MORGAGNI regrets that the ſymptoms of the caſe were not more accurately marked by Valſalva.

* Vide Dr. Cullen's Firſt Lines, par. 416.

va. The author of theſe remarks has ranked it as an example of hepatitis, from conſidering not only the appearances on diſſection, but alſo the expreſſion in the hiſtory of the caſe, that "the pain gradually abated." This, in his opinion renders it probable that the pain had been a principal ſymptom.

Although the morbid appearances be not detailed ſo accurately as might have been wiſhed, there is reaſon to conclude that both the external membrane of the liver, and the parenchymatous ſubſtance had been inflamed. It cannot however be determined, whether the inflammation had originally begun in the former or in the latter part.

The exciting cauſe was probably the congeries of veſicles attached to the external ſurface of the liver.

SECT. V. *GASTRITIS;* OR, INFLAMMATION OF THE STOMACH.

THE ſymptoms which characteriſe this diſeaſe are by no means accurately pointed out by authors; a circumſtance that may be attributed to two cauſes, The infrequency of the caſe, and the extenſive

extenſive nervous influence of the affected organ. While the former of theſe cauſes prevents any individual practitioner from collecting ſuch a number of obſervations as entitles him to draw general concluſions; the latter muſt vary the type of the diſeaſe, in different caſes, according to the ſuſceptibility of impreſſion of the nervous ſyſtem in the perſon affected.

The ſymptoms commonly enumerated * are, fever, with ſmall, quick, hard pulſe; violent burning pain in the region of the ſtomach; painful vomiting, more eſpecially after any thing is ſwallowed, whether it be liquid or ſolid; moſt diſtreſſing thirſt; conſtant watching; great reſtleſsneſs, and continual toſſing of the body; hiccup; difficult reſpiration; coldneſs of the extremities; fainting; intermitting pulſe; and convulſions.

In addition to theſe ſymptoms, Dr. Cullen has remarked that gaſtritis is attended with greater loſs of ſtrength than any other inflammatory diſeaſe; and Meza has mentioned, that ſuppreſſion of urine, without any diſtenſion of the bladder, or, in other words, the ſuſpenſion of that ſecretion, takes

* Vide Tranſlation of Hoffman, reviſed by Dr Duncan, vol. i. p. 229. Macbride's Works, 4to edit. p. 449. Meza, loco citato, p. 27. Joſeph Quarin, loco citato, p. 351. Dr Cullen's Firſt Lines, vol. i. p. 412.

takes place. In the following caſes, purging as well as vomiting occurred.

The pathognomonic ſymptoms are ſaid to be, violent burning pain, with ſwelling about the ſtomach, painful vomiting and eructation, and hiccough. But a caſe is noticed by De Haen *, where not only was the vomiting abſent after the firſt attack, but alſo did the appetite for food continue unimpaired. On the other hand, Sauvages obſerves †, that a diſeaſe prevailed at Montpelier, in the ſummer of 1760, which reſembled gaſtritis in every ſymptom, but that of vomiting. He imagined that the ſterno-coſtalis muſcle had in theſe caſes been inflamed.

The event of this diſeaſe is ſeldom favourable, as it moſt generally terminates in ſuppuration and ulceration, or in gangrene. Death, too, ſometimes happens merely from the violence of the inflammation, before either ſuppuration or gangrene can take place. This can only be accounted for from the wonderful connection between the vaſcular and nervous ſyſtem, and the great nervous influence which the ſtomach poſſeſſes.

The ſeat of the diſeaſe has been ſaid to be either in the villous coat of the ſtomach, or in its nervous coat, as it is termed, and the peritoneum

* Ratio Medendi, vol. iii. p. 30.

† Noſolog. Method, tom. i. p. 478.

inveſting it. In the former caſe, the inflammation is of the eryſipelatous kind; in the latter, of the phlegmonic. The latter alone is attended with the ſymptoms conſtituting gaſtritis. The former is commonly a ſymptomatic diſeaſe; and is not accompanied by marks of general inflammatory affection, nor by acute burning pain in the ſtomach.

CASES OF GASTRITIS.

CASE I. (XXX. 4.)

A NOBLEMAN, aged forty-two years, became affected with a double tertian fever, which, during the firſt paroxyſms, was accompanied with mild ſymptoms. On the fourth acceſſion, however, the ſymptoms were exceedingly violent, for the cold fit continued ſeven hours. He had very troubleſome thirſt; his tongue was rough; his breathing difficult. He was languid; his pulſe was ſmall and weak; and he complained of pain, and ſenſe of fulneſs in the ſtomach. He was at the ſame time ſo uneaſy and reſtleſs, that he could not continue even for a little time in the ſame part of the bed. All theſe ſymptoms became milder when the hot fit took place, and when he was allowed to drink diſtilled water. But this relief laſted only

ly a ſhort time; for an aggravation of his complaints ſoon returned, and he continued much diſtreſſed during the whole of that night. Early in the morning he felt an inclination to vomit, which at firſt could not be excited even by the irritation of the fauces by his fingers, which he did ſeveral times. Soon after, however, he vomited about four pounds of fluid, reſembling in colour water in which chocolate had been diſſolved. In this fluid, membranous-like ſubſtances, of the ſame colour, floated; and from it the ſame kind of ſmell uſually emitted from the bodies of thoſe affected with fever proceeded. Although the affection of the ſtomach abated ſomewhat after the vomiting; the other ſymptoms not only continued, but were even aggravated. In the morning veneſection was had recourſe to. The blood drawn in the firſt cup had its craſſamentum ſofter than uſual; had a thin cruſt on its ſurface, and exhibited a milky-like ſerum: but in the ſecond cup, the blood was much leſs altered. Notwithſtanding the employment of theſe and other means, almoſt the ſame quantity of the ſame kind of fluid as that formerly mentioned was vomited within a few hours; and this a little after happened again and again: ſo that the whole quantity vomited during that day was equal to ſixteen pounds. On the following night all the ſymptoms were violent; and beſides, a tremor of the left

arm ſupervened. This recurred frequently, eſpecially when the arm was expoſed to the air; and was always preceded by delirium. In the morning this tremor was converted into a kind of epileptic paroxyſm; by which not only his arm, but alſo his mouth, eyes, and left thigh, were violently convulſed. Theſe ſymptoms continued for many hours; and at length the affected arm became paralytic. The epileptic fits recurred ſo frequently, that more than twenty took place within an hour. At the ſame time, too, the vomiting became more frequent; and the matter thrown up was of a porraceous colour, and had ſmall membranous portions floating in it. Singultus, which had begun about mid-day, (after the paralytic attack) now became more violent. Although all theſe ſymptoms ſeemed ſomewhat abated in the afternoon, on the approach of evening they were aggravated; and the pulſe and ſtrength having failed more and more during the whole of the night, while he continued diſtreſſed with vomiting, delirium, ſingultus, and frequent violent, though ſhort, ſpaſmodic attacks, he died in the morning.

Appearances on Diſſection.

Abdomen. The belly and the inteſtines were ſwelled. The anterior ſurface of the ſtomach and inteſtines were tinged with the ſame colour as the matter which had been vomited. Internally the ſtomach

ſtomach was inflamed, and all its moſt minute veſſels were very much diſtended with blood. The gall-bladder, although it contained no bile, was turgid from air.

THORAX. The right lobe of the lungs adhered ſtrongly to the pleura: both it and the left were tinged with a black colour, and were full of ichorous matter. In the right ventricle of the heart there was a thin polypous concretion.

CASE II. (XXIX. 18.)

A MAN, aged forty years, of a brawny make, and accuſtomed to intenſe thought, having been affected for ſome days with pain in the head, and a ſenſe of heat in the parts on making water, was ſeized, after ſupper, at which he neither eat too much, nor any thing unwholeſome, with excruciating pains in the region of the ſtomach. The pain of the head continued, and the pains in the ſtomach became aggravated. He diſcharged, by the mouth and by ſtool, a large quantity of green-coloured mattter. Under theſe circumſtances, he died at the beginning of the third day.

Appearances on Diſſection.

ABDOMEN. The right ſide of the ſtomach was ſound; and on its internal ſurface, about the antrum pylori, to the extent of ſeveral fingers breadth, numerous lenticular glands, much enlarged,

larged, appeared. The fundus, on the left ſide, was marked with bright-coloured bloody ſpots. Some of theſe ſpots having begun to be covered with an ugly ferruginous incruſtation, ſhowed that the inflammation had approached to the ſtate of gangrene. On the ſame ſide, at the part on which there were no ſpots, the internal coats ſeemed ſound; but diſcharged blood very readily when preſſed. The duodenum, and reſt of the inteſtinal canal, exhibited no morbid appearance. The gall-bladder, at the diſtance of two or three inches from the lower part of its fundus, was contracted, and became again dilated before it terminated in the cyſtic duct: ſo that it appeared to form a double gall-bladder.

Thorax. The lobes adhered, by means of their own membrane, to the parietes of the cheſt, and alſo to the mediaſtinum: they were however ſound, although their poſterior part was red. The back and poſterior parts of the arms were alſo of a red colour. The heart contained no blood, either within the ventricles or auricles.

Case III. (xxix. 20.)

A poor country woman, apparently about fifty years of age, was ſubject at times to difficulty of breathing, together with a ſenſe of ſtraitneſs in the cheſt; accompanied with hard pulſe, and with

ſo

ſo great pulſation in all the arteries, that their alternate action could be diſtinctly ſeen both in the hands, in the neck, and in the temples. When diſtreſſed with the difficulty of reſpiration, ſhe was accuſtomed to come to the hoſpital of Bologna, where ſhe was relieved by being bled freely. The blood drawn at theſe times was ſomewhat hard. In this manner ſhe lived for four years; when at laſt having at her own home became affected with pains in the ſtomach, ſhe died within twenty-four hours.

Appearances on Diſſection.

ABDOMEN. The ſtomach was large, and half full; but when opened, it ſeemed aſtoniſhing that all its contents had not been evacuated by vomiting. For internally it appeared eroded in ſeveral different places. The eroſions, although evidently recent, were already affected with a gangrenous colour. They were exceedingly numerous, and very minute about the pylorus; from which they alſo extended to the contiguous part of the duodenum. Eroſions, of a larger ſize, were ſeen here and there on the fundus, about the cardia, and even in the œſophagus. Theſe eroſions, therefore, ſeemed to have been produced by what had been ſwallowed: but what that was, could not be learned, neither from the previous hiſtory of the caſe, nor from an examination of the matter that remained in the ſtomach. The ſpleen was ſomewhat

what larger and more flabby than uſual; and was glued to the diaphragm for a conſiderable extent, and alſo to the ſtomach in a ſmall degree: this might perhaps ariſe from its large ſize. The uterus lay very much to the left ſide; and on that ſide the round ligament was ſhorter than on the right. Within the cervix uteri, at one ſide, a ſmall thick white membrane, of a pyramidal form, adhered, by a flattened head, which ſeemed to be the remains of a hydatid formerly diſtended with fluid. The ſanguiferous veſſels of the urinary bladder, even from the openings of the ureters, were ſo exceedingly red, that, although they were very ſmall, they could not have been better ſeen, nor could their anaſtomoſes have been more diſtinctly marked, had they been filled with wax. In this manner they were continued from both ſides into the urethra; along the internal ſurface of which they were obſerved in great numbers, and much diſtended; but, on that account, they did not form ſo beautiful an appearance as in the bladder. On cutting into the meſentery, which was well ſupplied with fat of a good colour, (as the other parts of the body were, and in a greater degree than could have been ſuppoſed from the appearance of the ſubject) ſeveral large glands were obſerved. Theſe were ſound; but ſome of them equalled in ſize the largeſt bean. The beginning of the ſuperior meſenteric artery was com-

mon alſo to the celiac. The coronary artery of the ſtomach was much larger than natural. The vena cava, though cut through both above and below the liver, did not diſcharge a ſingle drop of blood.

Thorax. Both ſides of the cheſt contained a ſmall quantity of colourleſs watery fluid. The lungs were turgid with air, and adhered to the pleura at the back and at the ſides. Some polypous concretions appeared in the heart; and alſo in the jugular veins, which contained more blood than the veins below them did. The parietes of the heart were obviouſly thicker than natural on the left ſide, and thinner than uſual on the right. There was not, however, any dilatation of the ventricles, nor of the pulmonary artery and veins, nor of the aorta. The valves at the mouth of the aorta were ſomewhat hard. Within the trunk of that veſſel, both near the heart and at other places, here and there, ſpots appeared, marked only by a yellow colour, which were probably the beginnings of future oſſifications; for a little above the diaphragm, where they were of a larger ſize, and more protuberant, they were already indurated. The diameter, however, of that veſſel, was in no part enlarged. This was not the caſe with all its branches; for, beſides the coronary artery already mentioned, the left carotid was larger than the right. That veſſel was divided into two branches

within an inch and an half of its origin, which is very unuſual; and, at its diviſion, was more dilated than arteries generally are, where they ſend off branches. The ſame circumſtance appeared in the firſt diviſion of the ſubclavians.

Head. Although the brain was not examined till the twenty-eighth day after death, it not only appeared ſound, but alſo had no bad ſmell.

CAUSES of Gastritis.

Predisponent Cause. It cannot be doubted that ſome particular ſtate of the ſtomach prediſpoſes to gaſtritis; but its nature is ſo obſcure, that any attempt to inveſtigate it would be exceedingly unſatisfactory.

Exciting Causes. Beſides the ordinary general exciting cauſes of inflammation, every acrid ſubſtance applied to the ſtomach, whether in the form of aliment, medicine, or vitiated bile, or mucus, has been known to produce gaſtritis. Thus, it has been excited by external injuries, expoſure to cold, or cold and wet; the receſſion of cutaneous eruptions, or the ſuppreſſion of habitual evacuations; by the uſe of ſpirituous liquors, exceſſive indulgence in eating, and draughts of cold water when the body is heated; by ſwallowing acids

acids and alkalis, or poiſonous ſubſtances, ſuch as arſenic, &c. and thoſe various purgative medicines which produce their effect principally by ſtimulating the muſcular fibres of the inteſtines; and by an over-proportion of mucus or bile, or a vitiated ſtate of theſe ſecretions. The inflammation is ſometimes too communicated from neighbouring parts.

Some of theſe circumſtances occaſion gaſtritis in every different ſtate of the ſyſtem: ſuch, for example, are certain external injuries, ſwallowing concentrated acids, or alkalis, or arſenic, &c. But others, as all the general exciting cauſes of inflammation, the ordinary laxative medicines, over-proportion of mucus, bile, &c. are productive of no ſuch effects, unleſs ſome change from the healthy ſtate, either in the ſtomach or ſyſtem, or both, have previouſly taken place. The nature, however, of that change, as has been already mentioned, is ſtill involved in obſcurity.

REMARKS ON THE CASES OF GASTRITIS.

THE exciting cauſe in all theſe caſes is obſcure. In the firſt caſe, indeed, it probably was an over-proportion of bile in the ſtomach; which is a frequent conſequence of intermittent fever. In the ſecond, the patient had been habituated to in-

tenſe thought, which is well known to interrupt the functions of the ſtomach: hence an accumulation of mucus, or ſome morbid alteration in the food, might have taken place. In both inſtances ſome particular circumſtance muſt have prediſpoſed to the diſeaſe; for it is not an ordinary effect, either of intermittents or of intenſe thinking.

The third caſe is ſtill more obſcure than the former. The eroſion in the œſophagus, as well as in the ſtomach, induced MORGAGNI to think that the diſeaſe originated from ſomething ſwallowed.

SECT. VI. *ENTERITIS;* OR, INFLAMMATION OF THE INTESTINES.

INFLAMMATION of the inteſtines is marked by fixed pain, with tenſion in ſome part of the belly, eſpecially about the umbilicus; nauſea, vomiting; obſtinate conſtipation, attended with low, quick, hard pulſe; great thirſt, dry tongue, burning heat, and red-coloured urine.

The pain ſometimes invades ſuddenly, and ſometimes is uſhered in by ſhivering, or diarrhœa. Although fixed, it is occaſionally much aggravated, but

but is never entirely alleviated. It is increaſed upon touching the affected part; and is commonly accompanied by hardneſs and tenſion of the abdomen. The nauſea and vomiting are more ſevere in many caſes than in others; which has been thought to depend upon the vicinity of the inflamed part to the ſtomach. Apparent diarrhœa ſometimes attends; hiccup often. Sometimes this diſeaſe imitates, to a ſuperficial obſerver, hepatitis and gaſtritis: but from the former it is diſtinguiſhed by the abſence of the pain on the top of the ſhoulder, and from the latter by the painful ſenſation about the umbilicus. In ſome caſes, however, all theſe diſeaſes are combined. On ſome occaſions, too, the ſymptoms of inflammation of the inteſtines are ſo obſcurely marked, that they may be entirely overlooked. MORGAGNI has mentioned, on the authority of Valſalva, that where there is hardneſs and tenſion, with a ſlight degree of pain in the abdomen, attended with low, weak, unequal pulſe, and an unuſual appearance in the face, from wildneſs in the eyes, or lividneſs round the mouth, there is always reaſon to ſuſpect inflammation of the inteſtines.

This diſeaſe is a very dangerous one, as it ſometimes terminates in gangrene within a few hours from its commencement, and often within a day or two. Sometimes, too, it proves fatal during the inflammatory ſtage. It terminates alſo by exudation

exudation into the cavity of the abdomen or of the inteſtines; by ſuppuration, and ulceration, and ſometimes by reſolution.

The ſymptoms which indicate gangrene having taken place, are, ſudden ceſſation of pain, while the pulſe continues quick, ſmall, and unequal, and at the ſame time the extremities are cold, and the countenance remarkably dejected; the vomiting of fæces, or of the glyſters that have been exhibited; and the diſcharge of black fetid ſtools.

Fatal event during the inflammatory ſtage may be dreaded, if, along with ſuppreſſion of urine, violent hiccup, delirium, and ſubſultus tendinum, or convulſions, ſupervene.

Exudation into the abdomen is marked by ſudden ſwelling of the belly, and evident fluctuation in that cavity. When the exudation is into the inteſtines, it is known by the appearance of the ſtools.

Suppuration and ulceration are announced by conſtant vomiting, burning pain, and great ſwelling of the belly.

If the pains be gradually alleviated; if natural ſtools be paſſed; if univerſal ſweat, attended with firm equal pulſe, or if a copious diſcharge of loaded urine, with the ſame ſtate of the pulſe, take place, reſolution may be expected.

The ſeat of the diſeaſe is ſometimes in the large inteſtines; more often in the ſmall. Both coats of

of the inteſtines are probably affected in real enteritis; for there is reaſon to believe, that when the internal coat alone is inflamed, the ſymptoms enumerated do not occur. In ſome caſes, however, the inflammation is communicated from the internal to the external coat, and *vice verſâ*.

CASES OF ENTERITIS.

CASE I. (XXXV. 2.)

A STUDENT of medicine, fond of ſolitude, and naturally eaſily irafcible, when, as uſual, in perfect health, became, without any apparent exciting cauſe, except that he knew his father was then at the point of death, and expected every hour to receive intelligence of that event, ſuddenly affected, about the fourth or fifth hour of the night, with a violent pain in the umbilical region, more exceſſive ſometimes in one part, and ſometimes in another, but never leaving a certain ſpace of that region. A phyſician having been called, preſcribed a doſe of the electuary called Philonium Romanum. This however was thrown up: for he had already begun to vomit porraceous bile, which afterwards became æruginous, and at laſt, near his death, ſo black that it approached to the colour of ſoot. Within about ten hours from the beginning

beginning of the pain, Valſalva was called. As he found that the patient had an unpromiſing look, his abdomen being tenſe and painful to the touch, his pulſe being low, conſtricted as it were, and not ſufficiently perceptible, his urine of a red brown colour, and very turbid, and other bad ſymptoms being preſent; and recalling to his mind ſimilar caſes, he ſaw that much miſchief had been done within a ſhort time, and prognoſticated that the patient would die within twenty-four hours. That the patient, however, might not immediately underſtand this, he ordered him to ſwallow freſh drawn oil of ſweet almonds, and his belly to be anointed with oil of violets combined with camphor; and he deſired that two older phyſicians ſhould be ſent for. When theſe practitioners had conſidered the caſe, they were of opinion that the patient was oppreſſed with convulſions; and therefore adviſed that blood ſhould be drawn from the feet, and that a large cupping glaſs ſhould be applied to the abdomen. Valſalva having modeſtly objected to this practice, the advice of the two older phyſicians was adopted. A vein was twice opened. From the firſt wound nothing was diſcharged: from the ſecond a little blood flowed out; but it immediately loſt its force, and came out ſo ſlowly and feebly, that although the vein was then inſtantly ſtopt, the pulſe could no longer be felt. Slight delirium ſoon after ſuper-

vened: his eyes appeared ſomewhat convulſed; his reſpiration became difficult; and he died during the night, according to the prognoſis of Valſalva.

Appearances on Diſſection.

EXTERNALLY. When the abdomen was felt with the hand, it was obvious that ſome fluid was effuſed within it.

ABDOMEN. Extravaſated blood, in a fluid ſtate, to the quantity of a pound and a half, was found in the belly. A ſtrong ſmell, though not exceſſively ſtrong, iſſued from that cavity. The inteſtines were to a great extent, and eſpecially thoſe in the upper part, red in ſeveral places; and the ileum had already begun to grow livid. The peritoneum in ſome places, but more particularly where it inveſted the diaphragm, was marked with black ſpots. Where, however, it covered the external ſurface of the ſtomach, which organ internally was in a natural ſtate, it was unequal from black tubercles rather than ſpots. Theſe tubercles, although at firſt they appeared to be glands, were in fact nothing elſe but ſtagnant blood; or rather, they proceeded from an incipient gangrene.

THORAX. Some blood appeared effuſed into the bronchia.

Case II. (xxxv. 12.)

A poor blind old woman, of a ſmall and ſlender make, having been indiſpoſed for three days, was brought into the hoſpital of Padua, affected, it was ſuppoſed, with inflammation of the thorax. Nothing certain could be learned from herſelf; for her ſtrength was ſo much exhauſted, and her pulſe ſo very weak and ſmall, that ſhe died the very day ſhe was brought in.

Appearances on Diſſection.

Abdomen. The inteſtines were inflamed; as was alſo the liver. The internal ſurface of the uterus, probably from the ſame cauſe, was as red as if the woman had lately had the catamenia. The anterior and poſterior internal ſurface of the cervix joined at an angle on the right ſide; and from that part a ſmall membrane, though not very minute, was extended tranſverſely to the poſterior ſurface, adhering to it by its whole lower edge. The reſt of it was looſe and floating; and it lay in ſuch a manner, that, contrary to the common appearance of the valvulæ cervicis, its concave ſurface was turned upwards, and not downwards. It was therefore probable that this membrane had not exiſted originally, but had been produced, perhaps, in conſequence of difficult parturition; it was certain that the woman had

had born children. The uterus inclined to the right ſide.

Thorax. The lungs were ſound. The pericardium was every where connected to the heart, by a continued, but not very ſtrong, coheſion; for the two could be eaſily ſeparated by the fingers, without any laceration whatever. It did not adhere to the large veſſels. On the ſurface, by which it had adhered to the heart, a white ſpot appeared only in one part, and occupying a ſmall ſpace. The ventricles of the heart contain-tained blood of a black colour, as it was every where elſe in the body; but no polypous concretions. Concretions of that kind, however, were found in ſeveral veſſels. Some of them were round and white; and ſome of them were thick, firm, and even long, as thoſe were which extended from the right auricle to the internal jugular veins.

Head. In one of the eyes no morbid appearance occurred, except opacity of the cornea. In the other, although ſeveral parts were well formed, the chryſtaline lens appeared ſo much diminiſhed that very little of it remained. What did remain was white and opaque, yet internally moiſt. It, together with the iris, adhered to the cornea, where that coat was more opaque than natural, and ſomewhat excavated into a ſmall pit of an oval ſhape, and was tinged of a dirty yellow

colour. This diſeaſe, however, did not extend to the external ſurface of the cornea.

Case III. (xxxv. 14.)

A young man, addicted to the uſe of wine and ſpirituous liquors, who had lately laboured under intermittent fever, became affected with a pain in the belly, which was removed by the diſcharge of wind downwards. The pain however returned within a few days; and he was brought into the hoſpital of Bologna, on the ſixth day after the return. The pain continued conſtantly in the hypogaſtric region. It was ſlight, and only from time to time became violent. At theſe times, the belly often ſwelled conſiderably in that part; and when it was examined with the hand, ſeveral hard globules were felt. All theſe ſymptoms quickly diſappeared, and again recurred at intervals. The ſtomach was painful; and he vomited every thing received into it, not excepting the medicines, among which even was opium. As his belly could not be kept open, but by means of glyſters, it was determined that, while that circumſtance ſhould be held in view, both remedies and nouriſhment, conſiſting of broth and emolient herbs, ſhould be given by way of glyſter. This treatment, however, produced no alleviation of pain: beſides, no ſtool could be procured until an injection of linſeed

ſeed oil had been more than once exhibited. The belly was anointed with the ſame oil, and with other ſubſtances, without any good effect. He felt the pain eaſier, when ſitting up in bed than when lying: therefore, he ſat up even when he ſlept. He felt himſelf better too, and ſlept more eaſily, with an empty ſtomach, than when he had by chance retained any thing in it. This circumſtance, and alſo the abſence of ſome other ſymptoms which generally mark the preſence of worms in the alimentary canal, rendered it probable that his pain did not proceed from that cauſe, although he had, three days before this, vomited up a large lumbricus. At laſt he began to retain ſome nouriſhment, and even no longer to vomit his dinner. His cheeks were red, which he himſelf attributed to a determination of blood to the face, to which he ſaid he was ſubject. He was thirſty; and his whole abdomen was diſtended. It was now the fifth day ſince his admiſſion into the hoſpital; and in the morning of that day he ſaid he was ſomewhat better; a circumſtance which was confirmed by the appearance of his countenance, the tone of his voice, increaſed ſtrength of his body, as appeared from the manner he ſat, and the ſtate of his pulſe, which neither was then, nor hitherto had been bad. At that time he had no fever; nor had any feveriſh ſymptom, except perhaps on one occaſion, been obſerved during his reſidence in the hoſpital.

hoſpital. Within two hours, however, notwithſtanding theſe favourable appearances, he began ſuddenly to cry out from the ſeverity of pain, and he continued to do ſo for fifteen hours. In the mean time, he had vomiting; and towards the evening, he himſelf gave notice that his pulſe could no longer be felt, which was really found to be the caſe. At the end of fifteen hours from the commencement of this attack, he ſaid that he muſt get out of bed to go to ſtool. While at ſtool he fainted; and within half an hour died.

Appearances on Diſſection.

When the body was waſhed the day after death, a great quantity of fluid, like putrid blood, diluted with a very ſtinking tobacco-coloured liquid matter like fæces, was diſcharged from the mouth. The abdomen, in conſequence of this, became ſomewhat flaccid about the hypogaſtric region: and although in the epigaſtric region, which was of a livid colour, and in the remaining parts, it was ſtill hard and diſtended, it was leſs ſo than before death.

Abdomen. Whenever the cavity of the belly was opened, a great quantity of fluid, like that diſcharged from the mouth, burſt out ſo ſuddenly, that it was uncertain whether it had proceeded from the cavity of the belly, into which it had been previouſly effuſed, or from a diſtended inteſtine, which might have been readily cut through along

along with the peritoneum. At any rate the cavity of the belly appeared full of that fluid. All the ſmall inteſtines were as black as coal. The ſpleen alſo was ſimilarly affected with gangrene, at leaſt in part. The ſtomach, however, and that portion of the large inteſtines extending from the extremity of the ileum to the left hypochondrium, were found, as far as could be judged from external examination; for the intolerable ſtench, which was increaſed by the fæces having paſſed through a wound made by careleſsneſs in one of the inteſtines, prevented any more accurate examination. Along with the fæces a lumbricus worm, of a moderate ſize, was diſcharged through the wounded inteſtine.

Case IV. (xxxiv. 25.)

An old man, aged ſeventy-four, of a lean habit of body, addicted to drinking, had begun for a month to walk in ſuch a manner as to bear chiefly on his left leg. His ſervants remarked this circumſtance more than himſelf; and indeed he never ſpoke on the ſubject, nor appeared to feel pain in any part. Within eighteen days after, he was ſeized with a wandering pain in the belly, unattended with fever; which he himſelf, without any advice, expelled, by means of theriac. But within the ſpace of twelve days after, he became affected at mid-

day

day with excruciating pain, exciting the ſenſation, as he expreſſed it, as if he were bitten by dogs, at the ſuperior part of the iliac region, on the right ſide. The pained part was ſwelled, but was not diſcoloured. When touched ſuperficially, it felt ſoft; but when the hand was forced more deeply into it, a hardneſs was perceived. His pulſe was frequent, and quick in the contraction of the artery; but in other reſpects good. His eyes appeared much ſunk; his tongue was parched; and he paſſed a reſtleſs night. On the ſucceeding day his pulſe was more full, and was vibrating. The pain and ſwelling extended to the middle of the belly, and at laſt to the left ſide alſo. Seven ounces of blood were drawn from the right arm. The blood contained no ſerum, and exhibited a thick yellow cruſt. He had nauſea; but not to ſuch a degree as to vomit his food. His belly was kept open without any trouble. After having paſſed a very bad night, his pulſe, on the third day, was low; he had frequent bitter and ſour eructations; his voice was impaired, as if from convulſion; and his mind from time to time wandered, as the nonſenſe which he ſpoke fully indicated. On the fourth day, his extremities were now and then convulſed; and his whole body remained rigid for a quarter of an hour. At that time no pulſe could be felt; but whenever the convulſion ceaſed, the pulſe returned, and was

like that of a healthy perſon, except that it was low, and when preſſed upon by the fingers afforded no reſiſtance. Soon after, his reſpiration became very difficult; and although his tongue was moiſt, and the delirium had ceaſed, he vomited feculent matter; and in the evening of the ſame day he died convulſed.

Appearances on Diſſection.

Abdomen. The left lobe of the liver appeared flabby, and throughout gangrenous. The ſtomach and inteſtines, eſpecially the ſmall ones, were in ſome places red, in ſome livid, and in others black. The beginning of the colon, at that part where it was in contact with the muſcles that cover the foſſa iliaca, and alſo theſe muſcles themſelves, were compleatly gangrenous. It was ſo ſtrongly connected with theſe muſcles, that it could not be ſeparated from them without laceration. A livid-coloured ſerous fluid, mixed with pus, which had been found in the cavity of the abdomen, ſeemed to have been effuſed from that part of the inteſtinal canal, as the inteſtines contained a ſimilar fluid.

Case V. (xxxiv. 27.)

A woman, who had had a fall on her back about a year before, became affected with violent deep-ſeated pain in her belly, attended with vo-

miting. This having continued for ſome days, ſhe died.

Appearances on Diſſection.

ABDOMEN. The ſtomach was found wonderfully contracted. The caput cæcum coli was ſo much diſtended with ſemi-fluid yellow fæces, that it equalled the uſual ſize of the ſtomach. That inteſtine was affected with inflammation; which had alſo begun to extend over the neighbouring viſcera.

CASE VI. (XXXV. 10.)

A RUNNING footman, upwards of ſixty years of age, of a ſhort ſtature, and fat habit of body, having been no longer able to act as a ſervant, had begged for ſome years, and had drank very freely whenever he could procure wine. On his return home one day, he complained of being unwell; but he took nothing by way of remedy, except bread and wine. Immediately after this, he complained of pain in his belly; which continued till mid-night, when he died.

Appearances on Diſſection.

ABDOMEN. When the abdominal muſcles, which were flaccid, were cut through, and the cavity opened, a ſtrong ſmell was felt. A conſiderable portion of the ſmall inteſtines deſcended pretty low into the cavity of the pelvis, ſo as to reach

reach the junction of the urinary bladder and rectum, and filled up the whole ſpace therein contained. This, however, had been an original conformation, or at leaſt not a recent one. That portion, and other parts of the ſmall inteſtines, were in ſome places much contracted, and were there of a brown colour; but elſewhere they were red, the moſt minute vaſcular ramifications being as much diſtended with ſtagnant blood as if they had been injected with red wax. The large inteſtines were in the ſame ſtate here and there, eſpecially about the beginning of the colon. The edge of the liver was ſomewhat black. The ſpleen was larger than natural. The trunk of the aorta, within the belly, exhibited ſome ſmall points of oſſification. The vena cava was diſtended with much black fluid blood.

Case VII. (xxxv. 16.)

A SLENDER woman aged forty years, of a ſhort ſtature, and of a bilious temperament, having after a fit of paſſion become affected with pain in her ſide, was admitted into the hoſpital of Bologna. She had been a widow for three years; and had had no appearance of the menſes for eight years. A ſpitting of blood, to which ſhe had been ſubject from time to time, was imputed to this cauſe; though it appeared to the phyſician who attend-

ed her, to proceed from the pharynx rather than from the lungs. Pain, which reſembled that of the cutting of knives, was felt firſt below the left breaſt, and then, without leaving that ſituation, it extended to below the right breaſt; but there it was more ſlight, ſo that ſhe could lie upon that ſide. The pain was aggravated when the part affected was touched; and it rendered her reſpiration difficult. It had been uſhered in by febrile rigour, which, although the fever did not intermit, recurred every day. Her face was fluſhed. She had great thirſt; and ſhe ſuffered much from a cough, as it aggravated the pain. Her expectoration was frequently bloody; at other times white, thick, and frothy. She was ſometimes affected with the ſenſation of ſomething riſing up to her throat. At laſt ſhe felt a pain about the umbilicus, as if ſhe were torn by dogs. The belly was open. Blood was drawn from her foot; and other means deemed uſeful were employed. Within a few days after this, without any previous critical evacuation, all the ſymptoms were ſo much alleviated, that the phyſician pronounced her to be convaleſcent. She aroſe; but her ſtrength having immediately failed, ſhe was obliged to return immediately to bed, where ſhe was found, with her limbs drawn up, and her body bent, in the poſition generally taken by thoſe affected with the ſenſation of cold, and without any pulſe. When

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ſhe was aſked, whether ſhe felt any pain in the thorax or abdomen, ſhe replied in the negative. On the ſame day, ſhe began to paſs fetid blood by ſtool. She afterwards grew delirious, and had ſubſultus tendinum. In conſequence of theſe circumſtances, ſhe became much weakened, ſo that ſhe could no longer ſpeak; and, on the ſixteenth day from the beginning of the diſeaſe, ſhe died.

Appearances on Diſſection.

Abdomen. When the belly, which had become flat, was cut into, and the cavity laid open, a ſmell, ſuch as generally proceeds from gangrenous parts, with a combination of that kind of acid ſmell felt where there are lumbrici, was emitted. Almoſt all the ſmall inteſtines were of a red, approaching to a livid and black, colour; and in them ſome lumbrici were found. The ſame livid colour appeared at the lower part of the flat ſurface of the ſpleen, and penetrated pretty deeply into its ſubſtance. The pancreas had become thickened, and conſiſted of a kind of indurated globules. The liver was alſo ſomewhat hardened. The gall-bladder was diſtended with calculi, to the amount of an hundred and twenty, together with ſome pale coloured bile. The largeſt of theſe calculi, which were twenty in number, equalled a filbert. All the calculi had a pretty firm ſmooth ſurface. They were of various ſizes and ſhapes; but they all, as is generally the caſe, approached

approached nearly to the form of a cube. One of them being applied to a burning candle, at firſt ſwelled and bubbled up, emitting no bad ſmell; and then took fire. It preſerved the flame, melting into drops, and from time to time, while burning, ſparkled with a ſmart noiſe, and retained flame to the very laſt; ſo that the flame proceeding from it was more durable and more bright than that of burning ſealing wax. Others were burnt in the ſame manner, and exhibited the ſame phenomena. The uterus inclined ſo much to the right ſide, in conſequence of the round ligament on that ſide being very ſhort, that, looking at the middle of the pelvis, no uterus was ſeen. A puſtule, of the ſize of a lupin, filled with white purulent matter, projected from the uterus, at the inſertion of the left Fallopian tube. When the puſtule was opened, and the matter diſcharged, the ſubſtance of the uterus which it hollowed out appeared black. The Fallopian tubes contained matter which was not white, but of a yellow fleſhy colour. The ovaria were contracted: within them there were a few veſicles; and the coat of one of them was in ſome meaſure cartilaginous.

Thorax. The lungs, on their anterior ſurface, were connected to the pleura in a very few places by membranous ſubſtances. They were ſound; except the anterior part of the right lobe, the ſubſtance of which was compact, but not in a very

ry great degree. The pericardium contained no ſerum. The heart was flabby. In the right ventricle, and at the orifices of all the veſſels, ſmall polypous concretions were ſeen. The poſterior part of the pharynx, oppoſite to the epiglottis, was very much eroded: and the velum pendulum palati alſo at one part appeared black, rotten, and entirely perforated.

Head. When the head was ſeparated from the neck, a conſiderable quantity of watery fluid flowed out from the great foramen of the os occipitis. On opening the head, a ſimilar fluid was found under the pia mater, eſpecially on the left ſide. The lateral ventricles contained reddiſh ſerum. The choroid plexuſes were rendered unequal by a number of hydatids, which readily burſt on being touched. When the medullary ſubſtance was cut into, bloody points appeared: and when it was preſſed, a greater quantity of blood than uſual was ſqueezed out. The ſame ſmell of worms which was felt in the belly, was perceived alſo in the diſſection of the brain, in the tongue, in the pharynx, and even in the very eyes.

Case VIII. (xxxiv. 23.)

A man, aged fifty years, of a lean habit of body, and pale colour, having drank a great deal of wine along with ſome fellow-drunkards, was ſeized

ſeized with violent, but wandering pain, in the belly, attended with flatus, vomiting of bilious matter, and a quick pulſe. On the morning of the ſucceeding day, as the pain was not only more ſevere, but alſo fixed in one part, which was very ſore to the touch, Valſalva being afraid of inflammation, ordered a vein to be opened. All remedies, however, were in vain: for he died about the beginning of the fourth day after the attack.

He had been two years before affected with acute fever, from which he had recovered without any evident criſis. Soon after this, he complained of much thirſt; he felt a very great weakneſs in the head and ſtomach; and his ſtrength became impaired. Along with theſe ſymptoms he was ſometimes diſtreſſed with conſiderable oppreſſion, which at night when he wiſhed to go to ſleep, was ſucceeded by tremor of the whole body. It was imagined by ſome that the man laboured under phthiſis pulmonalis. But Valſalva thought that his complaints proceeded from a quantity of water in the cranium; and on that account, he preſcribed thoſe medicines which are proper for dropſical patients.

Appearances on Diſſection.

Abdomen. A large portion of the ileum was inflamed. All the other viſcera were ſound.

Thorax. A very large polypous concretion

appeared in the right ventricle of the heart, from whence it extended into the vena cava.

Head. A conſiderable quantity of ſerous fluid was found within the cranium; and the ventricles were full of the ſame kind of fluid. The glands of the choroid plexuſes were very large, and contained much ſerum. The corpus callo-ſum, and the other parts which joined the two hemiſpheres of the brain, were flabby.

Case IX. (xxxi. 25.)

A woman died in conſequence of dyſentery.

Appearances on Diſſection.

Abdomen. The inteſtines were found in a ſtate of inflammation. The right kidney was wanting; but the deficiency was ſupplied by the left, which was twice the ordinary ſize, and contained a double pelvis, and double ureter. Both ureters went to the right ſide of the bladder.

Case X. (xxiv. 16.)

An old man, of a lean habit of body, was brought into the hoſpital of Padua, on account of ſtrangulated hernia. His pulſe was ſmall and weak, but not intermitting; yet notwithſtanding every means which could be employed, he died.

Appearances on Diſſection.

Abdomen. The inteſtines were inflamed. The teſtis next the hernia was conſiderably leſs than the other. When cut into, its ſubſtance internally appeared of a brown red colour; but that of the other was natural. Between the ſound teſticle and the tunica vaginalis, there was a little quantity of watery fluid; and at one extremity of the ſame teſticle, a ſmall roundiſh body, like the remains of a ruptured hydatid, projected. The gall-bladder was placed tranſverſely; and although it was of the ordinary ſize, it was not received as uſual into a depreſſion of the liver; for after its fundus was ſeparated from the liver, (and this was done without the leaſt force being neceſſary) the part to which it had adhered could ſcarcely be diſtinguiſhed, being ſo ſmooth, that if any veſſel had connected them, it muſt have been ſo exceedingly minute as to eſcape the notice of the ſenſes. This was certainly an original conformation. It contained a little quantity of black, and ſomewhat viſcid bile, together with twenty calculi. Theſe were of a black colour; ſmall, but nearly equal to each other in ſize. They all conſiſted of ſeveral globules as it were; and being indented into each other, they were all in contact. When applied to a burning candle, they neither melted nor flamed, and ſcarcely even ſparkled. All the other abdominal viſcera were ſound.

Thorax.

THORAX. The left coronary artery appeared changed into a bony canal, to the extent of ſeveral fingers breadth, where it ſurrounded the baſis of the heart. A part of that long branch which is ſent down from it, along the anterior ſurface of the heart, to the extent of three fingers breadth, was alſo oſſified. From this circumſtance, the blood was tranſmitted on both ſides, not through a membranous canal, nor through a veſſel which had here and there points of oſſification, but through a continued bony tube, in a few places only ſofter than in others; and theſe formed tranſverſe lines which might be compared to the joints of a ſmall reed. When the heart was opened, and ſome polypous concretions were removed, the tubercles of the valves of the aorta appeared much harder than uſual, and almoſt oſſeous. No points of oſſification, however, were found in any of the valves, nor in the aorta near the heart. But the internal ſurface of that veſſel, at ſome diſtance from the heart, both at the origin of the veſſels going to the head and ſuperior extremities, and alſo from that part quite to the diviſion into the iliacs, was in many places unequal, from very hard bony ſcales; ſeveral of which equalled in ſize the nail of the thumb. The internal coat of the artery, however, which covered all theſe ſcales, ſeemed injured only in one

place, where there was an aperture, in which a thickiſh white matter was obſerved. Bony ſcales were alſo diſcovered at the origin of the ſubclavian and carotid arteries on the right ſide, and alſo in the iliacs, and in the ſplenic as far as its inſertion into the ſpleen. No oſſifications, however, were obſerved in the arteries within the head, nor in the ſuperior extremities; thoſe in the latter were harder and ſomewhat wider than uſual. The blood which remained in the crural arteries was not fluid, nor yet was it polypous.

Head. Polypous concretions, of a pretty conſiderable thickneſs, were found in the lateral ſinuſes of the dura mater. In the right and left ventricles of the brain there was ſome ſerous fluid. On the choroid plexuſes of both theſe ventricles, hydatids appeared, ſome of which were pretty large.

Case XI. (xxxiv. 5.)

A man, aged forty years, of a ſanguineo-bilious temperament, who was ſometimes troubled with a ſlight hernia at the groin, became affected after eating artichokes with ileus. A ſlight tumor appeared at the groin: but he denied that he felt any pain there; and complained only of pain in the belly, which was very much indurated from the retention of the fæces. All the remedies that were

were tried proved in vain; for on the ſeventh day fatal vomiting ſupervened.

Appearances on Diſſection.

Abdomen. The inteſtines appeared turgid with air; and at that part near the cæcum where they are doubled, they were livid and black; and, together with the annexed portion of the meſentery, which appeared fleſhy as it were, had fallen down to the extent of four fingers breadth into a hernial ſac, with ſo narrow an orifice, that, after they had been diſtended with the matter contained in them, they could not have returned into the abdomen. This ſac was in the right groin: and was formed by an elongated and dilated portion of the peritoneum; but not, as was formerly imagined, by that portion of it which accompanies the vas deferens and ſpermatic veſſels; for it lay on the anterior part of that proceſs and of thoſe veſſels, which were very much diſtended with blood. It was internally of a black colour, or rather of a black green, as if it had been ſtained by vitriol, as a ſtrangulated portion of the inteſtine generally is. In the left groin there was another ſac very much like that juſt deſcribed, except that the membrane of which it was formed was in every reſpect natural.

Thorax. Polypous concretions of a yellow colour, along with coagulated blood, were found within the ventricles of the heart. That in the

right was larger than that in the left; but neither extended beyond the ventricles.

Case XII. (xxxiv. 9.)

A young man, a ploughman, who had been ſeven years before troubled with a hernia on the right ſide of the ſcrotum, having had the prolapſed inteſtine replaced, and retained by means of a truſs, ſuffered no inconvenience from it, until he had laid aſide the uſe of the bandage, when, after having been affected with intermittent fever for two months, and having ſtuffed himſelf with dumplins and other indigeſtible preparations of unleavened flour, the inteſtine again fell down as formerly. On that very day he began to have vomitings of bitter matter. To theſe, ſingultus and pain of the ſcrotum ſupervened, on the fourth day of the diſeaſe. The ſcrotum having been fomented with warm ſoap leys, the pain in it ſeemed alleviated. But as the vomiting and ſingultus continued, and as he was beſides affected with pains in his belly, together with thirſt, he was brought on the ſixth day into the hoſpital of Bologna. The *emplaſtrum de cruſta panis* having been applied to the region of the ſtomach, and an enema compoſed of linſeed oil and of oil of violets, having been exhibited, the ſingultus, and vomiting alſo, abated, though for a ſhort time only.

On

On the ſeventh day the pain in the ſcrotum was diminiſhed. His pulſe was leſs frequent than it had been on the preceding day, but was weaker than it ſhould have been in a young man; his thirſt continued; and he paſſed no fæces until the oily injection already mentioned had been exhited. On this day, injections, compoſed of the Carminative Decoction, as it is called, to which clarified honey, together with two drachms of electuary, called Benedicta Laxativa, were added, having been adminiſtered, the vomiting of bitter matter returned, and at the ſame time a worm of the lumbricus kind was thrown up. The injection was not entirely paſſed even after many hours had elapſed. On the eighth day another lumbricus was vomited. The abdomen, although it was tenſe, which it had been the day before, and although it reſounded under the hand as if there were tympanites, was not painful to the touch, even though rudely handled; except, indeed, in the epigaſtrium, where he felt a kind of gnawing pain. When he was aſked if he alſo felt heat in that part, he replied in the negative. His pulſe was nearly in the ſame ſtate as on the day before, except that it was much more frequent. His tongue was parched. His urine was of a deep colour. Under his eyes there was a livid mark; and, independent of that, his face had an unfavourable appearance. He paſſed a reſtleſs night; and

and on the ninth day was much in the ſame ſtate, though, indeed, his pulſe, and the appearance of his countenance, were rather worſe; for his pulſe was ſomewhat quicker, and the artery when preſſed afforded little or no reſiſtance, and his face had nearly that appearance ſtiled Hypocratic. Although on the preceding days he had had conſiderable anxiety, and ſpoke in a deſponding tone of voice, and frequently changed the poſture of his limbs; on this day all theſe circumſtances appeared more remarkably. Moreover, beſides the conſtant pain over his whole belly, he felt at intervals, in different parts of the abdomen, but eſpecially in the epigaſtrium, gnawing ſenſations. He was aſked if he had any throbbing pain in his belly, or if he felt throbbing in any part of his body; and he anſwered in the negative. The pain which he felt in the ſcrotum and contiguous part of the belly, was not, on theſe latter days, according to his eſtimation, the chief pain. His ſkin was dry and rough; but not unuſually warm. After having taken ſome food, he felt better. He ſaid that he had been relieved the day before by the oily injection, which indeed he had mentioned at that time. On this day he had another injection, conſiſting of broth in which coriander ſeeds had been boiled, and into which ſugar had been put. When he paſſed this, he vomited the food he had taken. Towards the evening he had

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ſome ſleep. After this, he complained of a kind of throbbing ſenſation in the epigaſtrium, and of ſome ſenſe of heat in the belly. In the mean time, he vomited at intervals a yellow-coloured matter, more liquid than that hitherto thrown up. All theſe ſymptoms having continued during the whole night; on the morning, which was the tenth day from the beginning of the diſeaſe, he died.

Appearances on Diſſection.

Abdomen. A great quantity of the ſame kind of matter as that vomited, was found extravaſated in the cavity of the abdomen; and the ſtomach and ſmall inteſtines, even as far as the hernia, were greatly diſtended with the ſame kind of matter. Within all that tract of the inteſtines, a ſingle lumbricus only, like thoſe formerly vomited, was diſcovered. The large inteſtines, which were empty, and of a white colour, were ſound. The ſtomach was alſo ſound. The duodenum, however, to the extent of ſix fingers breadth, had become ſo livid from inflammation, that it had a gangrenous ſmell. The jejunum, and by much the greateſt part of the ileum, were here and there affected with a ſlighter degree of inflammation, as they were not livid. The remaining part of the ileum, namely, that, which lay neareſt the colon, was rather gangrenous than inflamed. The hernial ſac was of the ſhape of a pear; and was compoſed of a coat, which was not leſs thick and firm than

that of the pulmonary artery. It was covered not only by the ſcrotum and dartos, but alſo by the cremaſter muſcle, and the membrane on which that muſcle in common with the teſtis lies; and alſo by the veſſels belonging to the teſtis. The teſtis lay under the ſac; and its veſſels, which adhered externally to the inſide of the ſac, paſſed into the belly near its orifice, but not through it. That orifice was like a pretty thick ring, which had been formed by the peritoneum and ſurrounding tendon. Beſides the ileum, and part of the meſentery attached to it, it contained alſo the omentum, almoſt no part of which had been ſeen covering the inteſtines on the left ſide, as it had been drawn down on the right ſide into the hernia. It not only extended to the bottom of the ſac; but from thence forming itſelf into a round body, (which, unleſs it had been cut into, could never have been known to have been compoſed of the compreſſed ſubſtance of the omentum), it returned upwards, and was connected to the ſtrangulated ileum, at no great diſtance from the orifice of the ſac. That portion of the omentum, thus prolapſed, was here and there connected to the ſac, by certain interpoſed red flabby ſubſtances, which could be eaſily ſeparated both from the ſac and omentum; and appeared to be nothing elſe than membranous cells filled with blood and ſerum. The ileum neither was connected

nected to the ſac, nor did it extend to its fundus; but being reflected a little below the orifice, it returned into the belly by the ſame paſſage by which it had come out: ſo that not more than four or five fingers breadth of the inteſtine was ſtrangulated. All that portion being affected with gangrene, was of a black colour; and that part conſtricted by the orifice of the ſac was much more black and gangrenous; as was alſo the ring forming the orifice of the contiguous part of the ileum, lying above it, which was ſo rotten as to have been incapable of bearing the weight of the fluid that had diſtended it: for the fluid had eſcaped through a pretty large opening into the cavity of the belly. The edge of the liver was black; and its concave ſurface, together with the gall-bladder, which was ſmall, were of a blackiſh colour. All the contents of the belly were not a little warm, although the body was not opened till thirteen hours after death.

THORAX. A ſoft yellow polypous concretion was found in the right ventricle of the heart, from whence it ſent out white-coloured branches even as far as the jugular veins.

CASE XIII. (XXXIV. 14.)

A WOMAN, above fifty years of age, who had, for thirty-two years been affected with two herniæ,

both on the left ſide, the one at the umbilicus, and the other at the pubis, having accidentally fallen, received a contuſion about the top of one of the ſcapulæ and the extremity of the ſhoulder bone. Although ſhe readily recovered from this bruiſe, ſhe began in a few days after the fall to be coſtive, and ſoon after to vomit a yellow fluid matter of the ſame ſmell as fæces. The vomiting, although it occurred at other times, took place chiefly about two or three hours after having taken food. Her pulſe was neither frequent, nor did it afford very little reſiſtance when the artery was preſſed; but it was exceedingly ſmall, particularly after vomiting; and it became ſmaller every day. As glyſters produced no effect, mercury, to the extent of two drachms, was twice given. The firſt doſe proved of no uſe; but by means of the ſecond ſhe had three ſtools, the two firſt of which conſiſted of indurated fæces, and the latter of fluid feculent matter. The medicine ſeemed to have no bad effect. Nevertheleſs, about twelve hours after having taken the ſecond doſe of mercury, that is, within four or five days after the vomiting had begun, having half an hour before had a return of the vomiting, ſhe died. During the whole courſe of the diſeaſe, ſhe had neither been affected with obvious fever, nor with convulſions, nor had ſhe complained much of pain in the belly.

Appearances

Appearances on Diſſection.

Abdomen. When the belly was opened, a ſtrong ſmell was perceived. The jejunum and contiguous part of the ileum were quite diſtended with the ſame matter which had been vomited. The remaining part of the ileum, and the large inteſtines, were contracted. The jejunum, in ſome places, was marked longitudinally with ſtreaks of a bright red colour; in other places it was of a red brown colour, as the ileum was almoſt every where. That latter inteſtine, not far from the jejunum, to the extent of three or four inches, formed into an arch, together with the annexed meſentery, had fallen down into the ſac of the lower hernia. Although it neither adhered to the ſac, nor was compreſſed by its oriſice, which formed a kind of ring, it had become gangrenous. It was of a black bloody colour; and bloody ſerum diſtilled from its ſurface. The upper hernia, when looked at externally, ſeemed divided into two little eminences. Internally, it was found to conſiſt of one ſac only, formed by the peritoneum, into which nothing more than a portion of the omentum had entered. The liver was ſomewhat harder than uſual. The ſpleen was flabby, and externally appeared in ſome places livid. The ligaments of the uterus were black; that organ itſelf was very ſmall, and had thin parietes. On cutting into it, the ſubſtance of the parietes in the middle was ſo livid, that it appeared

appeared approaching to the ſtate of gangrene. As the uterus was ſituated a little lower than uſual, the ſtate of the vagina was examined, in order to aſcertain how far the uterus had fallen down. When the labia were ſeparated, and the orificium vaginæ brought into view, a body was ſeen within it, which at firſt might have been taken for the os tincæ. But as the uterus had not appeared placed ſo low as to reach that part, even although it had been very large, the vagina was immediately taken out of the body, that the diſeaſed appearance might be more accurately examined. It was then found, that the glandular body of the urethra, called the Proſtate, had become very thick, and had drawn down the vagina, which was flaccid and deſtitute of rugæ, ſo low, that its extremity, where perforated by the orificium urethræ, might have been readily miſtaken, by an unſkillful perſon, for the os tincæ.

Case XIV. (xxxiv. 15.)

A woman, aged thirty-nine years, of a pretty good habit of body, having not a bad colour, and much leſs a jaundiced appearance, the mother of ſeveral living children, was ſubject to a ſmall femoral hernia, which ſhe was accuſtomed to replace herſelf whenever it became troubleſome. She had nurſed a child for ſix months, when ſhe had

had a fit of the hernia, from which ſhe could not relieve herſelf as formerly. After having for ſeveral days attempted to reduce the prolapſed inteſtine, ſhe became affected with fever, vomiting, and the other ſymptoms which attend ſtrangulated hernia, except that ſhe could always paſs ſome little by ſtool. She was brought into the hoſpital of Padua, though too late, as ſhe looked like one juſt at the point of death. Nevertheleſs ſhe dragged out her exiſtence for ſeveral days, on the laſt of which ſhe even ſeemed to be better, and to be relieved, by the glyſters which were exhibited. On that day, however, ſhe died.

Appearances on Diſſection.

Abdomen. The hernial ſac, which was thick, and made up of many laminæ, eaſily ſeparable from each other, being brought into view, was found to be entirely unconnected with the round ligament of the uterus, but to be attached to the crural veſſels, on the inſide of which it lay. Its orifice was not narrow; and therefore the compreſſion of the prolapſed inteſtine proceeded from the lower edge of the external oblique muſcle, called Poupart's ligament, that lay over it. Under this ligament ſome part of the colon was prolapſed. The inteſtine, however, remained ſufficiently open, except at the orifice of the ſac, where it was rendered impervious. At that part it was in contact with the ſac, and was black and putrid.

The

The contiguous portion of the inteſtine without the ſac was green. The parietes of the abdomen, internally, were alſo of a green colour, and had a ſtrong ſmell in moſt places. The gall-bladder was ſomewhat larger than natural; and contained, along with ſome bile of a black colour, ſixteen calculi. All theſe were ſmall, though not very much ſo; and were nearly equal in ſize to each other. Externally they were yellow, and they had ſeveral ſmooth ſurfaces. One of theſe calculi, in its wet ſtate, being applied to a lighted candle, burnt with ſparkling, and melted, but did not preſerve the flame.

Thorax. The whole left lobe of the lungs was connected to the pleura on one ſide, and to the mediaſtinum on the other. The thyroid gland was larger than natural. At the orifice of the pulmonary artery, inſtead of three valves, four were ſeen. They were all of the natural appearance, except one which was larger in every dimenſion.

Head. A great many bloody points appeared in the medullary ſubſtance of the brain, in conſequence of a large quantity of blood being accumulated within the cranium, as was evident from the diſtended ſtate of both venæ cavæ, and of the veins running into them, eſpecially the vena azygos.

Case XV. (xxxiv. 18.)

A porter, ſo much worn out by conſtant working, that although he was only fifty years of age he appeared much older, had a hernia in the right groin, of the ſize of one's thumb, which ſometimes ſeemed to diſappear. Without any previous cauſe, except perhaps that a ſtorm of ſnow had ſuddenly occurred after mild weather, he became affected with a wandering, but acute pain, in the belly; as if, to uſe his own expreſſion, he were torn by dogs. By the application of ſome kind of ointment to the abdomen, the pain ſeemed to remit; but it ſoon began a-freſh, and was never afterwards alleviated. On this account he was brought, on the ſixth day of the diſeaſe, into the hoſpital of Bologna. At that time his ſkin was not hot, nor was his pulſe very frequent; but it was ſmall, and when the artery was preſſed with the fingers, it gave little reſiſtance, and its pulſations were found to be of unequal force. His whole abdomen was as tenſe as a drum; more eſpecially below the right hypochondrium, where ſome cells of the colon could, it was thought, be felt by the hand, a pretty hard hernia being there formed, although he denied that the principal ſeat of the pain was in that part. He vomited his food. For four days he had had

no ſtool; and had not even been able to expel wind from the inteſtines, though he made many efforts for that purpoſe. Freſh drawn oil of almonds was given him, and a glyſter conſiſting of ten ounces of linſeed-oil was exhibited. The latter was paſſed in the ſame ſtate as it had been injected; the former was thrown up, and he complained that he had been much diſtreſſed thereby. When aſked what kind of taſte he felt in his mouth, he replied, that of poiſon. He had great thirſt; and the vomiting continued. On each of the two following days, which were the ſeventh and eighth, a glyſter was exhibited; that on the former day was compoſed of Laxativa Benedicta; and that on the latter, of milk and the yolk of an egg: but they produced no more effect than the former. No fæces being paſſed; the other ſymptoms having continued; the pulſe, although after the ſixth day it had been no longer irregular, having become weaker, and ſmaller, ſo that it could ſcarcely be felt; the ſkin being ſhrivelled, the body cold, and he being no longer able to raiſe his eye-lids, and ſcarcely to ſpeak, except to aſk for wine, he gradually ſunk; and on the evening of the ninth day, died in a placid manner.

Appearances on Diſſection.

EXTERNALLY. The body had a filthy appearance;

ance; and the ſkin, which was rigid, was not free from a ſcabby eruption.

Abdomen. When the belly was opened, a gangrenous ſmell iſſued forth. The omentum, as far as it extended into the hernia, was of a red colour from inflammation, except in a few broad tranſverſe lines. The ſpleen in ſome part was of a morbid livid colour, which penetrated its ſubſtance, though to no great depth. The ſtomach extended much more to the right ſide than uſual; being completely diſtended with a yellow matter reſembling nothing more than fluid fæces; and the ſmall inteſtines, as far as the hernia, were alſo diſtended with the ſame fluid. Whatever commonly paſſes from the ileum to the large inteſtines had remained in it, and that was in very conſiderable quantity. All the large inteſtines were contracted, and were of a white colour; by which it was evident that there had been no paſſage through the prolapſed portion of the ileum; although the tube of the inteſtine itſelf had not entered the hernial ſac, but having paſſed by the ſide of it, only ſent into it a portion of its paries ſtretched into the form of a ſemi-oval cavity. The one axis of this cavity, where it began gradually from the inteſtine, meaſured about three fingers breadth, and was in the longitudinal direction of the inteſtine; and the other, extending between the anterior ſurface, at the diſtance of leſs than an inch

from the inſertion of the meſentery, and the inferior ſurface, was much ſhorter. From its beginning, this cavity was contracted more and more, as its ſemi-oval figure required, until at the middle, where it meaſured one inch in depth. This part, whether it be called a cavity or a cell of the inteſtine, was the only portion of the inteſtinal canal interrupted by the hernia, into which alſo the extremity of the omentum was prolapſed. Neither of theſe parts could be drawn back from the hernial ſac, becauſe they were not only ſhut in by the tendinous orifice of the ſac, but were alſo tied down to the ſac itſelf, by bands, which although not very ſtrong, were very numerous. The ſac on its internal ſurface was ſmooth, except at the part connected with the hernia, where it was ſomewhat rough. It was formed by the peritoneum, ſtretched outwards near the outſide of the ſpermatic veſſels. On each ſide of the hernia there was a ſwelled inguinal gland; one of which was nearer the ſac than the other, and ſeemed compoſed in part of a white ſubſtance. That part of the inteſtine next the ſac, and ſtill more that in contact with it, was of a black red colour. The inteſtine above the ſac, (for below, as mentioned, it was white,) was to a conſiderable extent of a red colour, approaching to livid; and from that, as far as the ſtomach, it was evidently red from the ſanguiferous veſſels being in many places

places much diſtended. The meſentery was of the ſame colour.

THORAX. The lungs adhered everywhere to the pleura, (excepting the right lobe at the anterior ſurface) but more eſpecially at the ſides and at the back, where that membrane was thicker than natural. The right lobe, at the upper part, where it adhered very ſtrongly to the pleura, was exceedingly hard, as if from an old diſeaſe; and its lower part was alſo not a little firmer than natural. The lungs were almoſt everywhere full of fluid. In the pericardium there was no ſerum. The heart was flabby; and at each of its orifices, as well as in the right ventricle and left auricle, it contained ſmall tender polypous concretions. The ſmalleſt of theſe was that in the left auricle; and the largeſt that in the pulmonary artery, extending from thence into its ramifications.

CASE XVI. (XLIII. 27.)

A MAN affected with all the ſymptoms of ſtrangulated hernia, was brought into the hoſpital of Bologna. The diſeaſe having been too far advanced to yield to any treatment, he died.

Appearances on Diſſection.

ABDOMEN. The hernial ſac, included within the cremaſter muſcle and tunica vaginalis, lay behind the ſpermatic veſſels and teſticle. Within the

the ſac there was a double portion of the ileum connected to it; but ſo ſlightly, that it could be readily ſeparated by the fingers. This prolapſed portion could not be returned into the abdomen, on account of the ſtraitneſs of the ring through which it had paſſed, and the quantity of matter with which it was diſtended. The ring and the inteſtine within the ſac, as alſo the contiguous portion within the abdomen, to the extent of half an ell, were of a black colour. The reſt of the inteſtines were not turgid, although before death the belly had been ſomewhat ſwelled. Within the tunica vaginalis of the teſtis, on the ſide oppoſite to that containing the hernia, there was about a third of a table-ſpoonful of watery fluid. From the tunica albuginea, which in other reſpects was, as well as the teſticle itſelf, in a ſound ſtate, a ſmall roundiſh body projected. This was of the ſame colour, and ſeemed compoſed of the ſame ſubſtance, with the coat itſelf.

Head. Serous fluid was found effuſed within the cranium. The veſſels of the dura and pia mater were much diſtended with blood.

Case XVII. (xxxiv. 21.)

A man, aged fifty years, of a lean habit of body, after having undergone much fatigue in hunting,

ing, began to complain of the ſenſation of great heat in the throat and breaſt. This ſenſation having ceaſed in theſe parts, was transferred to the belly and loins; and being there accompanied with an acute pricking pain, rendered the patient ſo uneaſy, that he could not bear the affected parts to be touched. During the firſt days of the diſeaſe he had frequent rigors. Within five or ſix days before death, ſymptoms of volvulus ſupervened, attended with vomiting of the fæces; by which his ſtrength being gradually impaired, he died on the thirtieth day after having been confined to bed.

Appearances on Diſſection.

Abdomen. The belly was found almoſt completely filled with ſanious fluid, which had connected the omentum and inteſtines to one another. The inteſtines were much inflamed; as were alſo the liver and ſpleen; which latter was more deeply inflamed than the liver. The left kidney contained under its proper membrane ſome extravaſated blood; this did not however extend over the whole ſurface of that membrane. Numerous ſmall abſceſſes and ulcers appeared over the omentum and edge of the meſentery, more eſpecially at that part where it was connected with the colon.

Case XVIII. (lix. 15.)

A man, who appeared to be under fifty years of age, of a well-ſhaped body, ſomewhat fat, of a healthy complexion, a little inclining to brown, and whoſe hair and beard were black, having been cured in the hoſpital of Bologna of melancholic delirium with which he had been affected, took, on the day before he was to have left the hoſpital, half a drachm of the extract of black hellebore. This extract was prepared by pounding the recent roots with pure water; and was often exhibited to patients, without any bad effects, in the quantity of a ſcruple, and ſometimes to thoſe whoſe belly was not eaſily opened, even in the quantity of more than half a drachm. When this medicine was preſcribed, the perſon taking it was ordered to drink, during its operation, cow-milk whey; but this patient had not done ſo: he had taken nothing elſe than the extract. In conſequence of this doſe he had ſeveral ſtools. In the beginning of the night, that is, about ſeven or eight hours after he had ſwallowed the extract, when no miſchief was expected, he became affected with vomiting and pains in the belly. Theſe ſeemed alleviated ſoon after having taken ſome warm broth, that is, about the ſecond hour of the night; but at the fifth hour the ſame ſymptoms recurred.

Though he vomited no more than two or three table-ſpoonsful of a green blackiſh kind of matter, they again ſeemed to have abated ſo much that he went to bed before the ſixth hour, and at that time appeared to be quiet and eaſy, at leaſt he made no noiſe that indicated pain, ſo far as the patients in contiguous beds could obſerve. Nevertheleſs, at the eighth hour, a kind of ſound iſſuing from his mouth having been heard, the attendants ran to his bed, where they found him already dead.

Appearances on Diſſection.

EXTERNALLY. The limbs were not rigid nor contracted.

ABDOMEN. The ſtomach and the inteſtines externally appeared in different places inflamed. The ileum, in ſome places, was of the natural width; and in ſome narrower, and in others wider, than uſual. Where it was narrower than ordinary, the coats were very thin, and not of a red colour; in other parts they were marked with red ſtreaks. The ſtomach and the inteſtines were firſt waſhed out by water being paſſed through them, and then opened. The ſtomach, together with a ſmall portion of the annexed gullet, ſeemed to be inflamed on the left ſide only. The inteſtines, here and there, were affected with inflammation, which however was leſs conſiderable in the ſmall than in the large guts, except in the rectum; and

in it certain ſpaces were as much inflamed as thoſe in the ſtomach. No violent degree of inflammation was ſeen in any part of this ſubject. The ſpleen was larger than uſual, and was of a roſy colour. At the part in contact with the ſtomach, it was ſo flabby, that, when cut into, its internal parts ſeemed to flow out like a fluid. Nothing extraordinary was obſerved in the liver, except that the bile appeared through the coats of the gall-bladder to be of a light green colour.

Thorax. The lungs were ſound, and totally unconnected with the pleura. Something like a ſlender polypous concretion was found in the heart. The large veſſels contained little blood.

Head. When the upper part of the cranium was removed, a ſmall quantity of bloody ſerous fluid was diſcharged. The ſinuſes of the dura mater, and the large veſſels of the pia mater, contained little blood. The brain, which was ſurpriſing in one who had been affected with melancholic delirium, was ſo exceedingly flabby, that, when completely taken out of the cranium, and placed upon a table, the hemiſpheres falling outwardly at each ſide, tore the poſterior part of the corpus caloſum, although it was no more than ſix days after the death of the patient. Notwithſtanding that laceration, the faſciculus, which appears longitudinally through the middle of the corpus caloſum, was ſeen in a natural ſtate, on the upper

part, where it was entire. When the brain was cut into, it was found that the veſſels, both in the medullary ſubſtance, and in the choroid plexuſes, were not deſtitute of blood; but a great degree of flaccidity was obſerved in every part, as well of the brain as of the cerebellum and medulla oblongata. The pineal gland, which was rather larger and of a more globular form than uſual, was alſo flabby. Notwithſtanding the exceſſive laxity of all the other parts, the arch which joins the right and left ſide of the third ventricle was not in the ſmalleſt degree lacerated.

CAUSES OF ENTERITIS.

PREDISPONENT CAUSE. This does not ſeem to depend ſo much on the general ſtate of the ſyſtem which prediſpoſes to inflammatory complaints, as on ſome peculiarity, either natural or acquired, of the inteſtinal canal *. Perſons advanced in years are more liable to enteritis than others.

* MORGAGNI relates the following caſe, which marks very clearly how ſuſceptible of inflammation the inteſtines are, in particular ſtates of the ſyſtem. "An unmarried woman affected with cholic pains, unattended with any ſymptoms of fever, having been much relieved by the operation of a glyſter, which had brought off ſome bilious matter, and having become every day better, was no longer viſited by her attending phyſician. Her ſervants, however,

Exciting Causes. Beſides all the circumſtances enumerated as exciting cauſes of gaſtritis; the ſtrangulation or conſtriction of any portion of the inteſtines, in conſequence either of hernia or introſuſception, (that is, the paſſing of one part of a gut within another) and dyſentery, induce enteritis.

REMARKS on the Cases of Enteritis.

The firſt caſe affords a good illuſtration of the rapidity with which inflammation of the inteſtines deſtroys life †. It ſhows, too, how ſoon the favourable opportunity for blood-letting paſſes away in that diſeaſe.

The

however, having given a ſuppoſitory compoſed of honey, inſtead of an enema, which they were accuſtomed to exhibit every ſecond night, ſhe was immediately ſeized with an excruciating pain in the anus; and in the morning her pulſe could not be felt. Along with the pain, there was ſo great a degree of conſtriction of the anus, that a glyſter could not poſſibly be adminiſtered. When attempts were made, by means of emollient and anodyne remedies, to remove the pain and conſtriction, ſuddenly as great a relaxation of the affected parts as is met with in dead bodies took place; and about noon of that day ſhe died."

† Morgagni in his remarks upon this caſe mentions, that a monk at Bologna, who, although old, was very ſtrong, died within twelve hours from the firſt attack of enteritis, notwithſtanding every means that could be employed.

The third caſe proves how inſidiouſly enteritis often invades: for although MORGAGNI imagined that a remiſſion had taken place, yet, as there had been no ſymptoms of fever previous to the attack that proved fatal, it is perhaps more probable that the diſeaſe till then only threatened.

In the ſeventh caſe, the progreſs of gangrene was very clearly marked *. The worms obſerved in this and in the twelfth caſe, are to be regarded, not as exciting cauſes of the diſeaſe, but as an accidental circumſtance.

The ninth caſe is an example of dyſentery proving the exciting cauſe of enteritis.

The tenth, and following caſes, as far the ſeventeenth, are all inſtances of the diſeaſe having been produced by hernia †.

In the ſeventeenth caſe, not only was the meſentery affected, but alſo in ſome degree the kidney.

The laſt caſe is a ſtriking example of the pernicious effects of draſtic purges in particular ſtates of the ſyſtem.

In nine of the caſes, viz. the ſecond, fourth, ſixth,

* The ſmell that ariſes from the preſence of worms, ſo diſtinctly perceived in the different parts of the ſubject of this caſe, is a curious circumſtance.

† No remarks upon hernia can be introduced in this part of the work, as they belong to local diſeaſes.

ſixth, eighth, tenth, thirteenth, fifteenth, ſeventeenth, and eighteenth, the patients were above fifty years of age.

SECT. VII. *NEPHRITIS;* OR, INFLAMMATION OF THE KIDNEYS.

INFLAMMATION of one or both kidneys, is known by the ordinary ſymptoms of inflammatory fever, being attended by dull or acute pain in the region of the kidneys, ſometimes ſhooting along the courſe of the ureters, commonly accompanied with vomiting, and the frequent diſcharge of ſmall quantities of deep red-coloured urine*, and ſometimes alſo with coſtiveneſs.

In ſome caſes, a ſenſation of numbneſs is felt in the leg on the affected ſide, and the correſponding teſticle is drawn up; but theſe ſymptoms generally indicate calculus in the kidney or ureters.

The diſeaſe is diſtinguiſhed from rheumatic affection of the lumbar region, by the patient being able to bend his back without ſuffering excruciating pain.

Nephritis differs from calculus in the kidney or ureter

* The urine in ſome caſes too is quite limpid.

ureter (which has been ſtyled Nephralgia) by the ſymptoms of fever accompanying, or immediately following the attack of pain, and continuing without any remarkable intermiſſion. Whereas, in nephralgia they do not occur until a conſiderable time after violent pain has been felt, and they frequently diſappear entirely. In the latter caſe, too, the numbneſs of the thigh, and retraction of the teſticle on the affected ſide, always take place,

In nephritis the pain is often extended over part of the belly, and imitates that of enteritis. But, as the bowels are always either open, or eaſily rendered ſo by glyſters, the line of diſtinction between the two diſeaſes is readily drawn. Sometimes indeed both are combined.

The terminations of nephritis are the ſame as thoſe of inflammation of the other viſcera within the abdomen.

Reſolution may be expected, if the pain abate and the feveriſh ſymptoms diminiſh. The criſes are, profuſe univerſal ſweat, copious diſcharge of thick loaded urine, and hæmorrhagy from the ſeat of the piles.

Suppuration is to be feared if the pain continue violent, and become throbbing, and if then frequent rigors ſupervene. When purulent matter is paſſed off with the urine, no doubt can remain.

Gangrene is a very uncommon event in this diſeaſe.

caſe. It is marked by the general ſymptoms that characteriſe it in other caſes.

Sometimes the patient is carried off merely by the inflammation being communicated to other viſcera. In ſuch caſes, the urine is ſuppreſſed, and ſymptoms of enteritis take place.

The inflammation is commonly ſeated in the ſubſtance of the kidney, and ſeldom in its proper capſule *. In ſome caſes, a ſingle abſceſs of a prodigious ſize is formed in it; in others, there are many abſceſſes.

CASE of Nephritis.

(xxxvi. 20.)

An unmarried woman was affected with exceſſive vomiting, attended with fever. The vomiting ceaſed, but the fever remained; and a violent pain under the falſe ribs having ſupervened, ſhe died within two days.

Appearances on Diſſection.

Abdomen. Some very limpid ſerous fluid was found within the cavity of the belly. The ſtomach and inteſtines were much diſtended with air.

* Vide Dr. Baillie's Morbid Anatomy, pag. 178.

air. Each kidney was enlarged to more than three times its natural ſize. The left kidney contained between its proper inveſting membrane and cortical ſubſtance, eſpecially in that part which was towards the ſpleen, a ſmall quantity of ſanious matter.

Thorax. In the cavity of the cheſt there was a little watery fluid. The lungs were ſound, except that they were marked with a very few black ſpots. The pericardium was full of ſerous fluid. From the ventricles of the heart fluid blood was diſcharged; the right ventricle, however contained an incipient polypous concretion.

CAUSES of Nephritis.

Predisponent Cause. Many circumſtances are mentioned as prediſpoſing to nephritis: ſuch as the ſtructure of the kidney having become ſo altered, as to be very ſuſceptible of inflammation; hence, old perſons are more liable to the diſeaſe than others: the habit of conſtantly lying on the back: ſedentary life: the frequent or immoderate uſe of fermented liquors, &c. Like other viſcera, too, after they have been once inflamed, the kidneys are very liable to be again affected in the ſame manner.

Exciting

Exciting Causes. All the general exciting cauſes of inflammations may induce nephritis; but it is moſt commonly occaſioned by ſome circumſtance immediately affecting one or both kidneys. Thus, violent exerciſe on horſeback or in a carriage, external injuries, over-exertion in ſome particular exerciſes or occupations, the uſe of large doſes of diuretic medicines, &c. are the moſt frequent exciting cauſes of the diſeaſe.

The caſe of nephritis affords no room for remark.

END OF VOLUME FIRST.